



MMWRTM

Morbidity and Mortality Weekly Report

Weekly

April 11, 2003 / Vol. 52 / No. 14

Severe Acute Respiratory Syndrome (SARS) and Coronavirus Testing — United States, 2003

CDC and the World Health Organization (WHO) are continuing to investigate the multicountry outbreak of severe acute respiratory syndrome (SARS). Infection with a novel coronavirus has been implicated as a possible cause of SARS (1). This report updates information on U.S. residents with SARS and summarizes the clinical histories of the five U.S. residents identified as of April 9, 2003, who have both suspected SARS and laboratory evidence of infection with a novel coronavirus.

Epidemiologic and laboratory investigations of SARS are ongoing. CDC's interim suspected SARS case definition (available at <http://www.cdc.gov/ncidod/sars/casedefinition.htm>) continues to be based on clinical criteria and epidemiologic linkage to other SARS cases or areas with community transmission of SARS; abnormal radiographic findings are not required for suspected cases. The WHO case definition for probable SARS includes radiographic evidence of infiltrates consistent with pneumonia or respiratory distress syndrome (RDS) on chest radiograph (2). Cases reported to WHO outside the United States are probable SARS cases; the United States reports all suspected cases.

As of April 9, a total of 2,722 SARS cases have been reported to WHO from 16 countries, including the United States; 106 deaths (case-fatality proportion: 3.9%) have been reported to WHO (3). As of April 9, CDC had received 166 reports from 30 states of suspected SARS cases among U.S. residents (Figure); 135 (81%) cases occurred among adults (Table). Of the 166 persons with suspected SARS, 154 (93%) had traveled within the 10 days before illness onset to one or more of the areas listed in the case definition, nine (5%) had household contact with a person with suspected SARS, and three (2%) were health-care workers (HCWs) who had provided medical care to a patient with suspected SARS. The

majority of U.S. patients had normal chest radiographs (Table). As of April 9, a total of 33 (20%) patients were reported to have pneumonia or RDS. Of the 60 (36%) patients who were hospitalized for ≥ 24 hours, four (7%) remained hospitalized as of April 9, and no deaths were reported.

Travel Advisories

Travel advisories from WHO and CDC remain in effect. CDC has issued a travel advisory (available at http://www.cdc.gov/travel/other/acute_resp_syn_multi.htm) recommending that persons planning nonessential or elective travel to mainland China, Hong Kong, Hanoi, or Singapore consider postponing such travel until further notice. Persons who have traveled recently to these locations are urged to seek medical care if they develop fever of $>100.4^{\circ}\text{F}$ (38.0°C), cough, or difficulty breathing within 10 days of travel and to inform their health-care providers about recent travel to regions where SARS cases have been reported.

INSIDE

- 303 Prevalence of Current Cigarette Smoking Among Adults and Changes in Prevalence of Current and Some Day Smoking — United States, 1996–2001
- 307 Observational Survey of Smoking Provisions in Food Service Establishments — Southeast Health District, Georgia, 2001
- 310 Point-of-Purchase Alcohol Marketing and Promotion by Store Type — United States, 2000–2001
- 313 Update on Adverse Events Following Civilian Smallpox Vaccination — United States, 2003
- 315 Notices to Readers

The *MMWR* series of publications is published by the Epidemiology Program Office, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30333.

SUGGESTED CITATION

Centers for Disease Control and Prevention. [Article Title]. *MMWR* 2003;52:[inclusive page numbers].

Centers for Disease Control and Prevention

Julie L. Gerberding, M.D., M.P.H.

Director

David W. Fleming, M.D.

Deputy Director for Public Health Science

Dixie E. Snider, Jr., M.D., M.P.H.

Associate Director for Science

Epidemiology Program Office

Stephen B. Thacker, M.D., M.Sc.

Director

Office of Scientific and Health Communications

John W. Ward, M.D.

Director

Mary Lou Lindegren, M.D.

Acting Editor, MMWR Series

Suzanne M. Hewitt, M.P.A.

Managing Editor, MMWR Series

David C. Johnson

(Acting) Lead Technical Writer/Editor

Jude C. Rutledge

Teresa F. Rutledge

Jeffrey D. Sokolow, M.A.

Writers/Editors

Lynda G. Cupell

Malbea A. Heilman

Visual Information Specialists

Quang M. Doan

Erica R. Shaver

Information Technology Specialists

Division of Public Health Surveillance and Informatics

Notifiable Disease Morbidity and 122 Cities Mortality Data

Robert F. Fagan

Deborah A. Adams

Felicia J. Connor

Lateka Dammond

Patsy A. Hall

Pearl C. Sharp

Infection-Control Guidelines

Interim infection-control guidelines for health-care, household, and community settings will be updated and revised as new information becomes available. Infection-control practitioners, clinicians providing medical care for patients with suspected SARS, and persons who might have contact with persons with suspected SARS should consult these guidelines frequently to keep current with recommendations (available at <http://www.cdc.gov/ncidod/sars/index.htm>).

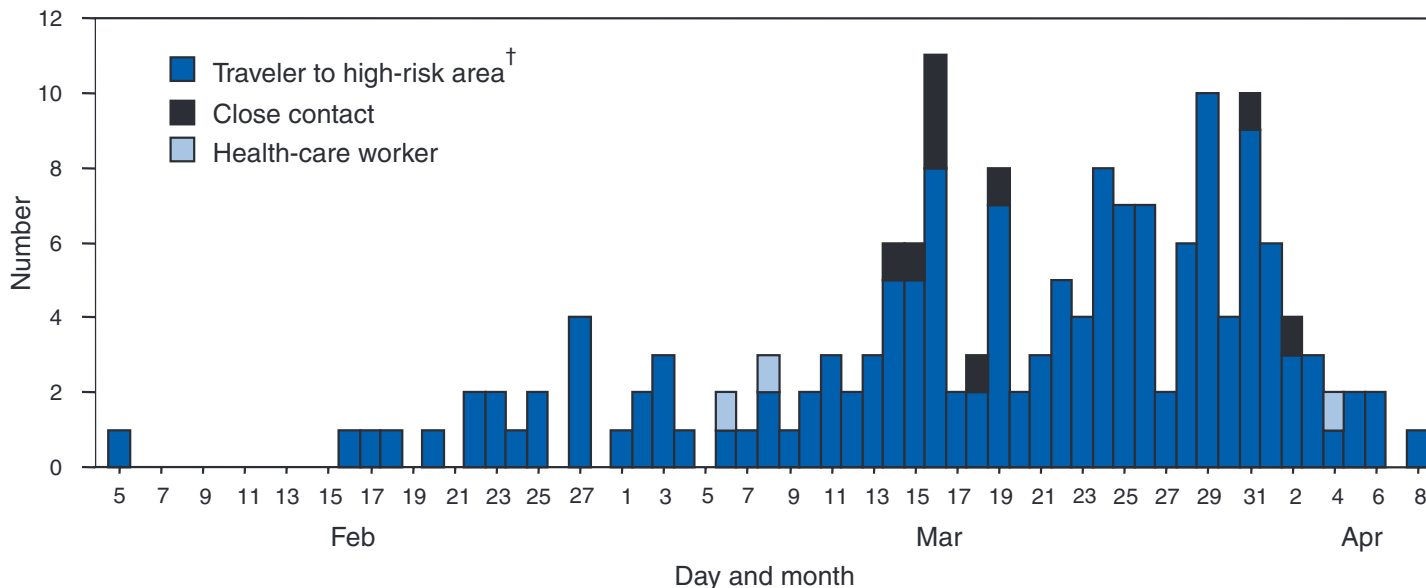
Diagnostic Testing

Laboratory diagnostic tests used at CDC to test clinical specimens for evidence of this novel coronavirus are still in development and are not available outside a research setting. Serologic testing for coronavirus antibody consists of indirect fluorescent antibody testing and enzyme-linked immunosorbent assays that are specific for antibody produced after infection. Although some patients have detectable coronavirus antibody within 14 days of illness onset, definitive interpretation of negative coronavirus antibody tests is possible only for specimens obtained >21 days after onset of fever. For other suspected SARS cases in the United States, a second serum specimen collected >21 days after fever onset will be necessary to determine whether infection with the novel coronavirus can be documented. A reverse transcriptase-polymerase chain reaction (RT-PCR) test specific for RNA from the novel coronavirus has been positive within the first 10 days after fever onset in specimens from some SARS patients, but the duration of detectable viremia or viral shedding is unknown, and RT-PCR tests on samples collected during convalescence might be negative. Viral culture followed by RT-PCR also has been used to detect the novel coronavirus in some specimens.

Case Histories

On April 3, CDC reported to the respective health departments positive coronavirus test results for five persons with SARS. All five had pneumonia requiring hospitalization and had traveled recently to a country in which community transmission had occurred. The five patients did not travel together or at the same time. Although two patients had a common hotel exposure in Hong Kong, no evidence of a single common exposure for all five patients has been found. Specimens from these five patients were among the first tested; patients were selected on the basis of their clinical and exposure histories. A description of the exposure and brief clinical history for each of these five SARS patients follows.

FIGURE. Number of suspected cases* of severe acute respiratory syndrome, by exposure category and date of illness onset — United States, 2003



* N = 166.

[†] Mainland China, Hong Kong, Singapore, or Hanoi.

Case 1. Patient I is a pregnant woman aged 36 years with a history of intermittent chronic cough; as of April 9, she was in her 26th week of pregnancy. During February 19–March 2, she traveled to Hong Kong and Guangdong province in China to visit her family. While in Hong Kong, she stayed at Hotel M during February 19–22 and again during February 24–March 2. The first stay was on the same floor and during the same time as Patient A (the index case in a large cluster of persons with suspected SARS described previously) (1). On February 8, Patient I's intermittent cough resumed. On February 24, she had onset of fever, chills, and headache. During the next 3 days, her cough progressed, and she had shortness of breath, myalgia, and blood-streaked sputum. She sought medical care in Hong Kong and received an antibiotic. Her symptoms worsened, and on return to the United States on March 2, she was hospitalized with a diagnosis of pneumonia. On admission, her temperature was 100.5° F (38.1° C), and rales were noted on chest examination. A chest radiograph showed bilateral lower lobe infiltrates, and her oxygen saturation was 93%. Laboratory studies on admission included a white blood cell count (WBC) of 3,300/mm³ (12% lymphocytes), platelets of 103,000/mm³, and alanine aminotransferase (ALT) of 42 U/L. During the next 3 days, despite treatment with broad-spectrum antibiotics, she worsened clinically with persistent fever and progressive pulmonary infiltrates. On March 5, she had respiratory failure and

required mechanical ventilation, and oseltamivir was added to her treatment. She improved gradually during the next week and was extubated on March 12. On March 17, she was discharged and was recovering as of April 9. Serologic testing of a serum specimen collected 12 days after illness onset was positive for coronavirus antibody. RT-PCR testing for human metapneumovirus is pending.

Case 2. Patient L is a man aged 39 years with a medical history of sleep apnea and hypothyroidism. He traveled on vacation to Thailand on February 23 and then to Hong Kong on March 1. During March 1–6, he stayed at Hotel M, at the same time as three other suspected SARS patients who were ill during their hotel stays (1). On March 6, he returned to the United States. On March 13, he had fever, myalgia, and a mild cough. During the next 3 days, he had diarrhea, vomiting, diaphoresis, and shortness of breath. On March 17, he was hospitalized with pneumonia and a right upper lobe infiltrate on a chest radiograph. Laboratory studies included a WBC of 6,600/mm³ (50% neutrophils and 30% lymphocytes) and platelets of 439,000/mm³. Maximum temperature during hospitalization was 102.4° F (39.1° C). He received broad-spectrum antibiotics but no antiviral therapy and was discharged on March 25. Serologic testing of a blood specimen collected 6 days after symptom onset was positive for coronavirus antibody. RT-PCR testing for human metapneumonia virus was negative. On March 19, his wife,

TABLE. Number* and percentage of reported severe acute respiratory syndrome (SARS) cases, by selected characteristics — United States, 2003

Characteristic	No.	(%)
Age (yrs)		
0–4	15	(9)
5–17	10	(6)
18–64	114	(69)
≥65	21	(13)
Unknown	6	(3)
Sex		
Female	85	(51)
Male	79	(48)
Unknown	2	(1)
Race		
White	96	(58)
Black	3	(2)
Asian	53	(32)
Unknown	14	(8)
Exposure		
Travel†	154	(93)
Close contact	9	(5)
Health-care worker	3	(2)
Hospitalized >24 hours§		
Yes	60	(36)
No	102	(62)
Unknown	4	(2)
Chest radiograph findings		
Pneumonia or RDS¶	33	(20)
Within normal limits	87	(52)
No or unknown results	46	(28)
Required mechanical ventilation		
Yes	1	(<1)
No	149	(90)
Unknown	16	(10)

* N = 166.

† To mainland China, Hong Kong, Hanoi, or Singapore.

§ As of April 9, no deaths of SARS patients have been reported in the United States.

¶ Respiratory distress syndrome.

who had traveled with him to Hong Kong, developed suspected SARS, including pneumonia requiring hospitalization. Her illness onset occurred 13 days after return from Hong Kong and resulted presumably from close contact with patient L.

Case 3. Patient X is a woman aged 49 years with a medical history of chronic sinusitis. She traveled to Hong Kong on business on March 2 and returned to the United States on March 8. The same day, she had fever, cough, and shortness of breath for which she sought medical care. She was given an oral antibiotic. Her symptoms persisted; on March 20, she was hospitalized with shortness of breath, chest pain, and rigors. On admission, she had a temperature of 101.4° F (38.6° C), a chest radiograph showed interstitial infiltrates, and oxygen saturation on room air was 92%. Laboratory studies on admission included a WBC of 5,100/mm³ (68%

neutrophils and 28% lymphocytes), platelets of 156,000/mm³, and ALT of 25 U/L. During her hospitalization, she received broad-spectrum antibiotics and corticosteroids but no antiviral therapy. On March 28, she was discharged in stable condition. An RT-PCR assay detected the novel coronavirus on a sputum specimen collected 14 days after illness onset. RT-PCR testing for human metapneumovirus was negative.

Case 4. Patient Y is a man aged 22 years with no notable medical history. He traveled to Hong Kong on vacation on March 3 and returned to the United States on March 6. On March 12, he had onset of fever, chills, myalgia, headache, and shortness of breath. On March 13, he had a cough and chest pain and was treated with oral antibiotics. The following day, he reported to an emergency department (ED) with persistent fever and cough. A chest radiograph demonstrated a right perihilar infiltrate. He received intravenous antibiotics in the ED and was discharged the same day on an oral antibiotic. On March 16, he had worsening shortness of breath and respiratory distress, and was admitted to a hospital intensive-care unit. On admission, his temperature was 102.9° F (39.4° C), with an oxygen saturation of 81% on room air. Chest radiograph demonstrated bilateral infiltrates with pleural effusion. Laboratory studies on admission included a WBC of 5,300/mm³ (82% neutrophils and 14% lymphocytes), platelets of 197,000/mm³, and ALT of 74 U/L. He received broad-spectrum antibiotics and oseltamavir. A direct fluorescent antibody assay for influenza type A and influenza type B was negative. By March 20, his condition stabilized, and he was discharged on March 22. Serologic tests of specimens obtained 4, 6, and 13 days after illness onset were positive for antibody to coronavirus.

Case 5. Patient Z is a woman aged 53 years with no notable medical history. She traveled to Singapore on February 27 and returned to the United States on March 13. While in Singapore, she visited hospitals that were providing care for patients with pneumonia and had close contact with several persons with probable SARS. She did not use a surgical mask or any respiratory precautions while in the Singapore hospitals. On March 9, she had a headache. During March 12–15, she had fever, chills, and myalgia. On March 15, she was hospitalized with a temperature of 102.7° F (39.3° C). On admission, a chest radiograph indicated bilateral basilar atelectasis. Laboratory studies on admission included a WBC of 6,500/mm³ (68% neutrophils and 19% lymphocytes), platelets of 216,000/mm³, and ALT of 56 U/L. She received broad-spectrum intravenous antibiotics but no antiviral therapy. Her condition stabilized by March 21, and she was

discharged on March 26. Although serologic testing of a specimen obtained 3 days after fever onset was negative, a second specimen collected 26 days after onset was positive for antibody to coronavirus. RT-PCR testing for human metapneumovirus is pending.

Reported by: CDC SARS Investigative Team; M Charles, DO, EIS Officer, CDC.

Editorial Note: Evidence of infection with a novel coronavirus has been identified in patients with suspected SARS in several countries (4–6), including the five patients in the United States described in this report. These patients were among those selected for priority coronavirus testing because of their specific clinical presentations and exposure histories. All had fever and respiratory symptoms (e.g., nonproductive cough, shortness of breath, and radiographic evidence of pneumonia). No consistent abnormal laboratory findings were noted, and the majority were within the normal ranges. Some laboratory tests that have been reported to be elevated in SARS patients, such as lactate dehydrogenase and creatine phosphokinase (4,6–7), were not measured for any of these patients. All five patients received broad-spectrum antibiotics appropriate for coverage of typical and atypical respiratory pathogens. Patients I and Y received oseltamivir, and Patient X received corticosteroids; no patients received ribavirin. These clinical histories are similar to those reported from Canada and Hong Kong, but, as of April 9, no initial characteristic signs or symptoms that clearly distinguish SARS from pneumonia caused by other pathogens have been described (4,6–8). However, if this novel coronavirus is the cause of SARS in these patients, the clinical symptoms described in this report most likely do not represent the full spectrum of illness related to coronavirus infection. Viruses that cause respiratory illness typically are capable of causing a range of clinical manifestations, and asymptomatic infections are possible.

State and local health departments are coordinating collection of follow-up serum specimens from SARS patients whose initial serum specimen might have been collected too early to indicate serologic evidence of infection. These results and investigations among well household and other well contacts of SARS patients (including travelers who were on airline flights with persons with SARS symptoms) will provide additional information about the spectrum of illness among patients with SARS and coronavirus infection.

The majority of U.S. residents with SARS, including the five persons described in this report who had evidence of coronavirus infection, have recovered or stabilized clinically without specific antiviral therapy. The efficacy of available antiviral therapies against coronavirus infection is unknown.

Ribavirin is a known teratogen, and clinicians who use it should be aware of all potential adverse events, including severe hemolytic anemia (9). Preliminary results from *in vitro* testing indicate that ribavirin concentrations that inhibit ribavirin-sensitive viruses do not inhibit replication or cell-to-cell spread of the novel coronavirus (JW Huggins, U.S. Army Medical Research Institute of Infectious Diseases, personal communication, 2003). However, further *in vitro* testing of antiviral drugs on other coronavirus isolates, and more information on the clinical outcomes of patients treated with ribavirin or other antiviral drugs in controlled trials is needed.

In several countries, widespread community transmission, as well as transmission among HCWs, has been observed. As of April 9, no U.S. HCWs who provided care for the five patients with coronavirus infection described in this report had suspected SARS. Among the close contacts of these five SARS patients, only one (the wife of Patient L) has suspected SARS. The different transmission patterns observed probably are not attributable to differences in infection-control practices alone. The inability to predict which patients are more capable of transmitting the virus that causes SARS underscores the need to adhere strictly to infection-control recommendations in both health-care and household settings. Similarly, close contacts of SARS patients should be vigilant to detect fever or respiratory symptoms, and persons who develop fever or respiratory symptoms should seek health-care evaluation.

On April 4, 2003, the president of the United States signed an executive order adding SARS to the list of quarantinable communicable diseases (<http://www.whitehouse.gov/news/releases/2003/04/iraq/20030404-8.html>). This act provides CDC, through its Division of Global Migration and Quarantine, with the legal authority to implement isolation and quarantine measures as part of transmissible disease-control measures, if necessary. Isolation refers to the practice of keeping a patient with a communicable disease separate from other persons, usually within a health-care facility or at home. Isolation is used routinely in hospital and health-care settings to reduce the transmission of infections to uninfected patients. Quarantine refers to any situation in which a person or group of persons who have been exposed to a communicable disease and might be infected, but who are not yet ill, are kept apart from others to prevent disease spread. States generally have authority to invoke and enforce quarantine within their jurisdictions although quarantine laws vary among states. Quarantine is an effective public health tool. Quarantine in the United States is used primarily to restrict patients with pulmonary tuberculosis who remain infectious but are unable or

*"When the mind is ready,
a teacher appears."*

Chinese Proverb

MMWR Continuing Education is designed with your needs in mind: timely public health and clinical courses, online exams, instant course certificates, and economical tuition (it's free).

Visit MMWR Online to learn more about our program's features and available courses.

MMWR CE
It's ready when you are.

cdc.gov/mmwr



unwilling to remain in settings where they are less likely to transmit illness. During the previous month, health officials in Singapore, Hong Kong, and Canada have implemented quarantine and isolation measures to limit the spread of SARS.

Although evidence is accumulating that a novel coronavirus is the primary causative agent of SARS, more laboratory and epidemiologic data are needed before this link is established fully. Once definitive identification of the cause of SARS has been achieved, an intensive focus on development of effective treatment regimens might reduce morbidity and mortality of patients with SARS. However, specific measures to prevent transmission (e.g., vaccination programs, prophylactic drugs, or hyperimmune globulin) might require more time to develop and implement. In the interim, strengthening traditional public health functions such as collection and rapid analysis of surveillance and epidemiologic data, and implementing essential infection-control measures for suspected SARS patients and their contacts, will be the mainstay of SARS control. A sustained and cooperative global public health response will be necessary to limit further dissemination of SARS and to prepare for emerging global microbial threats.

References

1. CDC. Update: outbreak of severe acute respiratory syndrome—worldwide, 2003. MMWR 2003;52:241–8.
2. World Health Organization. Case definitions for surveillance of severe acute respiratory syndrome (SARS). Available at <http://www.who.int/csr/sars/casedefinition/en>.
3. World Health Organization. Cumulative number of reported cases of severe acute respiratory syndrome (SARS). Available at http://www.who.int/csr/sarscountry/2003_04_02/en.
4. Poutanen SM, Low DE, Henry B, et al. Identification of severe acute respiratory syndrome in Canada. N Eng J Med. Available at <http://content.nejm.org/cgi/content/abstract/NEJMoa030634v1>.
5. World Health Organization. Summary on major findings in relation to coronavirus by members of the WHO multi-centre collaborative network on SARS aetiology and diagnosis. Available at <http://www.who.int/csr/sars/findings/en>.
6. Peiris JSM, Lai ST, Poon LLM, et al. Coronavirus as a possible cause of severe acute respiratory syndrome. Lancet 2003. Available at http://www.thelancet.com/journal/vol361/iss9364/full/llan.361.9364.early_online_publication.25242.1.
7. Lee N, Hui D, Wu A, et al. A major outbreak of severe acute respiratory syndrome in Hong Kong. N Engl J Med 2003. Available at <http://content.nejm.org/cgi/reprint/NEJMoa030666v1>.
8. Tsang KW, Ho PL, Ooi GC, et al. A cluster of cases of severe acute respiratory syndrome in Hong Kong. N Eng J Med 2003. Available at <http://content.nejm.org/cgi/content/abstract/NEJMoa030666v1>.
9. Hayden FG. Antiviral drugs (other than antiretrovirals). In: Mandell GL, Bennett JE, Dolin R, eds. Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases, 5th ed. Philadelphia, Pennsylvania: Churchill Livingstone, 2000.

Prevalence of Current Cigarette Smoking Among Adults and Changes in Prevalence of Current and Some Day Smoking — United States, 1996–2001

Tobacco use, particularly cigarette smoking, is the leading preventable cause of death in the United States and is responsible for approximately 440,000 deaths each year (1). One of the national health objectives for 2010 is to reduce the prevalence of cigarette smoking among adults to $\leq 12\%$ (objective 27.1) (2). To examine the prevalence of smoking for the 50 states, the District of Columbia (DC), Guam, Puerto Rico, and the Virgin Islands, CDC analyzed data from the 2001 Behavioral Risk Factor Surveillance System (BRFSS). This report summarizes the results of that analysis, which indicate that, during 2001, the median adult current smoking prevalence was 23.4% (range: 13.3%–30.9%) for the states and DC, and 12.5% (range: 9.8%–31.4%) for Guam, Puerto Rico, and the Virgin Islands. During 1996–2001, the prevalence of current smoking was relatively stable in 41 states and DC, and the proportion of current smokers who were some day smokers increased significantly in 31 of those states and DC. Because the only safe alternative to smoking is cessation, interventions should target all smokers to help them quit smoking completely.

BRFSS is a state-based, random-digit-dialed telephone survey of the non-institutionalized U.S. adult population aged ≥ 18 years. The 2001 BRFSS was conducted in the 50 states, DC, Guam, Puerto Rico, and the Virgin Islands. To determine current cigarette smoking, respondents were asked, “Have you smoked at least 100 cigarettes in your entire life?” and “Do you now smoke cigarettes every day, some days, or not at all?” “Current smokers” were defined as those who reported having smoked ≥ 100 cigarettes during their lifetime and who currently smoked every day or some days. “Some day” smokers were current smokers who responded that they smoked some days. Data on current smoking have been available since 1996.

Estimates were weighted by the sex, age, and race/ethnicity distributions of each area's population, and 95% confidence intervals (CIs) were calculated by using SUDAAN. The median response rate was 63.2% (range: 45.6%–87.1%) in 1996 and 53.5% (range: 48.9%–63.2%) in 2001. Temporal changes in current smoking and the proportion of some day smokers among current smokers were analyzed for 1996–2001, controlling for sex, age, race/ethnicity, and education by using logistic regression analysis. Both linear and quadratic terms were included in the models. Quadratic trends

indicated a significant but nonlinear trend in the data over time (i.e., leveling off or changing direction).

In 2001, the median prevalence of current smoking in the 50 states and DC was 23.4% (range: 13.3%–30.9%) (Table 1). Prevalence was highest in Kentucky (30.9%), Oklahoma (28.8%), West Virginia (28.2%), Ohio (27.7%), Indiana (27.5%), Nevada (27.0%), South Carolina (26.2%), and Alaska (26.1%), and lowest in Utah (13.3%), California (17.2%), Massachusetts (19.7%), Idaho (19.7%), Nebraska (20.4%), Oregon (20.5%), Hawaii (20.6%), Connecticut (20.8%), and DC (20.8%). Current smoking prevalence was 9.8% in the Virgin Islands, 12.5% in Puerto Rico, and 31.4% in Guam.

Smoking prevalence by sex varied significantly in 15 states and Guam, Puerto Rico, and the Virgin Islands, with rates being higher for men than for women. In the 50 states and DC, the median prevalence of cigarette smoking among men was 25.5% (range: 14.6%–31.7%) and among women was 21.5% (range: 12.1%–30.1%). Among both men and women, the prevalence was highest in Kentucky and lowest in Utah. In Guam, Puerto Rico, and the Virgin Islands, among both men and women, the prevalence was highest in Guam and lowest in the Virgin Islands.

During 1996–2001, no change in the prevalence of current smoking was noted for 41 states and DC. Significant linear or quadratic trends were detected in current smoking for 1996–2001 in nine states. Among the nine states for which changes in current smoking prevalence were found, Georgia, Tennessee, and Utah had linear decreases; Hawaii had a non-linear decrease; and Oklahoma had a non-linear increase. In addition, smoking prevalence declined and then increased in Minnesota and New Jersey, and increased and then declined steadily in South Dakota. The pattern in North Dakota was more complex: observed rates decreased during 1996–1998 followed by an increase through 2000 and a decline in 2001.

During 2001, among the 50 states and DC, the median proportion of some day smokers among current smokers was 24.0% (range: 15.2% [Kentucky]–41.2% [DC]) (Table 2). During 1996–2001, significant linear increases in the proportion of some day smokers among current smokers were noted in 31 states and DC, and seven states had nonlinear increases (Arizona, Kansas, Maryland, Missouri, Nevada, Rhode Island, and South Carolina) (Table 2). For DC and 31 of the 38 states with significant time trends in the proportion of some day smokers among current smokers, no change in the prevalence of current smoking occurred during 1996–2001.

Analysis of the combined data for 1996–2001 for all 50 states and DC indicated that the median proportion of some

TABLE 1. Prevalence of current cigarette smoking among adults*, by area and sex — Behavioral Risk Factor Surveillance System, United States, 2001†

Area	Men	Women	Total
	% (95% CI§)	% (95% CI)	% (95% CI)
Alabama	25.8 (±2.9)	22.1 (±2.2)	23.9 (±1.8)
Alaska	26.2 (±3.6)	25.9 (±3.2)	26.1 (±2.5)
Arizona	23.1 (±3.3)	20.0 (±2.5)	21.5 (±2.1)
Arkansas	27.4 (±3.0)	23.9 (±2.2)	25.6 (±1.8)
California	20.6 (±2.3)	14.0 (±1.6)	17.2 (±1.4)
Colorado	23.8 (±3.2)	21.1 (±2.6)	22.4 (±2.1)
Connecticut	21.3 (±1.8)	20.3 (±1.4)	20.8 (±1.1)
Delaware	28.2 (±3.1)	22.3 (±2.3)	25.1 (±1.9)
District of Columbia	24.9 (±3.7)	17.3 (±2.6)	20.8 (±2.2)
Florida	25.7 (±2.3)	19.5 (±1.7)	22.5 (±1.4)
Georgia	25.8 (±2.6)	21.8 (±1.8)	23.7 (±1.6)¶
Guam	38.7 (±5.7)	23.3 (±4.4)	31.4 (±3.7)
Hawaii	24.7 (±2.7)	16.4 (±1.9)	20.6 (±1.7)**
Idaho	21.1 (±2.2)	18.3 (±1.7)	19.7 (±1.4)
Illinois	26.6 (±2.4)	21.0 (±1.8)	23.6 (±1.5)
Indiana	29.7 (±2.4)	25.4 (±2.0)	27.5 (±1.6)
Iowa	24.2 (±2.6)	20.4 (±2.0)	22.2 (±1.6)
Kansas	22.5 (±2.1)	21.9 (±1.7)	22.2 (±1.3)
Kentucky	31.7 (±2.5)	30.1 (±2.0)	30.9 (±1.6)
Louisiana	28.7 (±2.3)	21.2 (±1.6)	24.8 (±1.4)
Maine	27.1 (±3.3)	21.1 (±2.4)	24.0 (±2.0)
Maryland	24.8 (±2.9)	18.1 (±1.9)	21.3 (±1.7)
Massachusetts	20.5 (±1.6)	18.9 (±1.3)	19.7 (±1.0)
Michigan	26.7 (±2.5)	24.7 (±2.0)	25.7 (±1.6)
Minnesota	24.9 (±2.4)	19.6 (±1.8)	22.2 (±1.5)**
Mississippi	29.4 (±3.1)	21.9 (±2.1)	25.4 (±1.9)
Missouri	27.5 (±2.8)	24.4 (±2.3)	25.9 (±1.8)
Montana	21.6 (±3.0)	22.2 (±2.6)	21.9 (±2.0)
Nebraska	20.8 (±2.3)	20.0 (±1.9)	20.4 (±1.5)
Nevada	27.9 (±3.5)	26.0 (±3.4)	27.0 (±2.4)
New Hampshire	25.5 (±2.4)	22.8 (±1.9)	24.1 (±1.5)
New Jersey	21.7 (±2.1)	20.9 (±1.8)	21.3 (±1.4)**
New Mexico	27.9 (±2.7)	20.1 (±2.0)	23.9 (±1.7)
New York	26.2 (±2.5)	20.9 (±2.0)	23.4 (±1.6)
North Carolina	28.6 (±2.8)	23.3 (±2.2)	25.9 (±1.8)
North Dakota	24.6 (±2.7)	19.6 (±2.2)	22.1 (±1.8)**
Ohio	29.0 (±2.9)	26.5 (±2.2)	27.7 (±1.8)
Oklahoma	31.2 (±3.0)	26.6 (±2.1)	28.8 (±1.8)**
Oregon	21.4 (±2.7)	19.7 (±2.2)	20.5 (±1.7)
Pennsylvania	26.4 (±2.7)	22.9 (±2.1)	24.6 (±1.7)
Puerto Rico	17.4 (±2.6)	8.2 (±1.4)	12.5 (±1.5)
Rhode Island	25.9 (±2.7)	22.2 (±1.9)	24.0 (±1.6)
South Carolina	28.1 (±2.9)	24.4 (±2.2)	26.2 (±1.8)
South Dakota	23.3 (±2.2)	21.5 (±1.7)	22.4 (±1.4)**
Tennessee	26.1 (±3.2)	22.8 (±2.1)	24.4 (±1.9)¶
Texas	25.2 (±1.9)	19.9 (±1.5)	22.5 (±1.2)
Utah	14.6 (±2.2)	12.1 (±1.7)	13.3 (±1.4)¶
Vermont	24.5 (±2.3)	20.6 (±1.8)	22.4 (±1.5)
Virgin Islands	13.3 (±2.7)	6.8 (±1.4)	9.8 (±1.5)
Virginia	23.4 (±2.7)	21.8 (±2.4)	22.5 (±1.8)
Washington	24.6 (±2.2)	20.6 (±1.8)	22.6 (±1.4)
West Virginia	28.9 (±2.9)	27.6 (±2.3)	28.2 (±1.8)
Wisconsin	25.4 (±2.6)	21.9 (±2.2)	23.6 (±1.7)
Wyoming	22.5 (±2.5)	21.9 (±2.1)	22.2 (±1.6)

* Persons aged ≥18 years who reported having smoked ≥100 cigarettes and who reported smoking every day or some days.

† Linear and quadratic trend analyses were conducted for BRFSS data from 1996 to 2001 by using a logistic regression model controlling for sex, age, race/ethnicity, and education. Prevalence estimates were not standardized by demographic variables.

§ Confidence interval.

¶ Significant linear trend ($p < 0.05$).

** Significant nonlinear trend ($p < 0.05$).

day smokers among current smokers was slightly higher among men than women (22.2% [range: 21.8%–22.7%] and 21.1% [range: 20.7%–21.5%], respectively) and decreased with age except for those aged ≥65 years (28.7% [range: 27.8%–29.7%], 22.1% [range: 21.7%–22.5%], 17.6% [range: 17.1%–18.1%], and 20.3% [range: 19.3%–21.2%], respectively, for those aged 18–24 years, 25–44 years, 45–64 years, and ≥65 years). Prevalence of some day smokers also was higher among Hispanics and non-Hispanic blacks than non-Hispanic whites (38.1% [range: 36.5%–39.8%], 26.9% [range: 25.9%–27.9%], and 18.7% [range: 18.4%–19.0%], respectively) and was highest among smokers with ≤8 years of education, at least some college education, and at least a college education compared with respondents with some high school education or high school graduates (24.2% [range: 22.4%–26.1%], 23.2% [range: 22.7%–23.8%], 31.7% [range: 30.9%–32.5%], 17.2% [range: 16.4%–18.0%], and 17.9% [range: 17.5%–18.4%], respectively). The patterns for sex, age, and race/ethnicity were generally the same across each state and DC, regardless of whether the overall proportion of some day smokers among current smokers had increased. However, among areas with significant increases in some day smoking, only respondents with at least some college education or a college degree had an increased rate of some day smoking during 1996–2001.

Reported by: S Porter, MPA, K Jackson, MSPH, A Trosclair, MS, LL Pederson, PhD, Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: The median prevalence of current smoking did not change substantially during 2000–2001 (3). However, smoking prevalence varied among the states, DC, Guam, Puerto Rico, and the Virgin Islands. As in 2000, during 2001, Kentucky and Nevada remained among the states with the highest prevalence, and Utah, California, and Puerto Rico remained among all areas with the lowest prevalence.

During 2001, the national health objective for 2010 of ≤12% of adults smoking cigarettes was achieved only in the Virgin Islands (9.8%). The low prevalence of smoking in the Virgin Islands, Puerto Rico, and Utah might be the result of stronger social and cultural norms against tobacco use compared with other parts of the country.

The findings in this report are subject to at least six limitations. First, BRFSS does not sample persons living in institutions or persons living in households without a telephone, both of which are subgroups at higher

dis•patch: *n*

(dis-'pach) 1 : a written message,
particularly an official communication,
sent with speed; see also *MMWR*.

know what matters.



TABLE 2. Proportion of current smokers who were some day smokers among adults*, by area — Behavioral Risk Factor Surveillance System, United States, 1996–2001†

Area	1996		1997		1998		1999		2000		2001	
	%	(95% CI)§	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
Alabama	21.6	(±4.2)	15.7	(±3.3)	21.2	(±4.3)	22.8	(±4.1)	23.6	(±4.3)	27.1	(±3.9)¶
Alaska	21.6	(±6.1)	16.0	(±5.3)	23.4	(±4.7)	29.8	(±7.3)	25.5	(±5.3)	27.7	(±5.0)¶
Arizona	16.2	(±4.9)	12.6	(±5.3)	9.5	(±3.9)	10.8	(±4.8)	27.0	(±10.7)	28.0	(±4.7)**
Arkansas	13.6	(±4.1)	13.0	(±3.7)	14.3	(±3.3)	16.9	(±2.9)	20.6	(±3.3)	21.3	(±3.5)¶
California	30.3	(±3.8)	31.8	(±4.1)	29.1	(±3.7)	33.1	(±3.7)	29.8	(±4.1)	29.8	(±4.1)
Colorado	26.7	(±5.0)	24.5	(±4.9)	25.2	(±5.4)	22.0	(±4.5)	24.9	(±4.8)	30.7	(±4.7)
Connecticut	20.2	(±5.3)	20.5	(±4.6)	26.5	(±5.5)	23.1	(±4.2)	22.9	(±3.5)	27.8	(±2.8)¶
Delaware	13.5	(±3.5)	16.2	(±3.9)	15.2	(±5.0)	18.5	(±4.0)	18.6	(±4.2)	24.0	(±3.9)¶
District of Columbia	26.8	(±6.2)	37.0	(±6.9)	30.6	(±6.3)	34.3	(±6.7)	33.7	(±5.4)	41.2	(±5.9)¶
Florida	16.9	(±3.1)	16.2	(±3.0)	18.1	(±2.6)	20.8	(±3.1)	23.5	(±2.9)	22.0	(±3.0)¶
Georgia	14.8	(±3.7)	21.5	(±4.3)	16.4	(±3.5)	22.9	(±4.5)	21.9	(±3.3)	25.8	(±3.4)¶
Guam											15.1	(±4.9)††
Hawaii	17.5	(±4.4)	23.7	(±4.9)	19.0	(±4.8)	22.0	(±5.7)	19.7	(±3.2)	19.7	(±3.6)
Idaho	20.7	(±3.5)	21.6	(±3.6)	22.0	(±3.0)	25.8	(±3.8)	24.1	(±3.2)	22.5	(±3.2)
Illinois	17.6	(±3.3)	23.1	(±3.6)	26.4	(±3.8)	18.5	(±3.2)	27.6	(±3.8)	26.7	(±3.2)¶
Indiana	13.0	(±2.9)	17.9	(±3.4)	20.4	(±3.5)	16.5	(±4.4)	17.0	(±3.0)	21.3	(±2.7)¶
Iowa	16.9	(±2.9)	19.2	(±3.1)	21.7	(±3.6)	19.4	(±3.4)	21.2	(±3.4)	23.2	(±3.7)¶
Kansas	15.8	(±4.0)	18.8	(±4.0)	17.6	(±3.3)	14.2	(±2.7)	19.7	(±3.0)	24.1	(±2.9)**
Kentucky	11.9	(±2.2)	10.2	(±2.1)	9.3	(±1.9)	14.0	(±2.4)	12.3	(±2.1)	15.2	(±2.2)¶
Louisiana	15.5	(±4.1)	21.6	(±4.5)	19.4	(±4.1)	20.3	(±4.6)	22.9	(±2.7)	22.9	(±2.6)¶
Maine	10.9	(±3.6)	12.7	(±3.6)	13.1	(±4.1)	15.0	(±6.3)	13.1	(±3.2)	24.0	(±4.2)¶
Maryland	14.5	(±2.9)	13.9	(±2.8)	25.4	(±4.4)	23.6	(±3.6)	25.8	(±3.5)	27.5	(±4.2)**
Massachusetts	21.0	(±4.7)	20.0	(±5.3)	20.7	(±3.4)	21.3	(±3.2)	23.3	(±2.4)	24.0	(±2.5)
Michigan	18.2	(±3.2)	18.5	(±3.2)	17.4	(±3.2)	22.5	(±3.6)	20.9	(±3.5)	23.0	(±3.0)¶
Minnesota	24.3	(±3.2)	23.6	(±2.9)	25.9	(±3.3)	22.4	(±2.9)	23.0	(±4.0)	23.9	(±3.3)
Mississippi	15.2	(±4.3)	17.6	(±4.5)	20.7	(±3.9)	19.4	(±3.8)	19.9	(±4.3)	22.7	(±3.8)¶
Missouri	18.9	(±4.3)	13.9	(±3.4)	15.2	(±2.8)	16.1	(±3.1)	16.8	(±3.0)	22.5	(±3.3)**
Montana	11.9	(±3.5)	12.3	(±3.5)	13.6	(±3.9)	20.9	(±5.1)	15.6	(±3.9)	24.5	(±4.5)¶
Nebraska	11.7	(±8.7)	16.4	(±3.7)	20.9	(±3.8)	21.4	(±3.8)	22.3	(±3.9)	21.6	(±3.5)¶
Nevada	10.8	(±3.7)	16.7	(±5.0)	22.2	(±6.0)	22.8	(±5.2)	24.3	(±4.6)	22.8	(±4.5)**
New Hampshire	17.1	(±4.2)	19.2	(±4.8)	21.7	(±5.2)	19.4	(±5.3)	22.2	(±4.6)	21.3	(±2.9)
New Jersey	21.5	(±3.7)	22.4	(±4.1)	20.5	(±4.1)	29.1	(±5.1)	29.0	(±3.9)	28.8	(±3.2)¶
New Mexico	27.1	(±7.1)	29.6	(±4.8)	28.2	(±3.6)	26.9	(±3.6)	28.2	(±3.8)	32.2	(±3.9)
New York	17.3	(±2.8)	17.5	(±2.9)	23.7	(±4.0)	21.9	(±3.7)	26.3	(±3.6)	28.3	(±3.5)¶
North Carolina	14.7	(±3.1)	18.9	(±2.8)	17.0	(±3.6)	16.5	(±3.7)	20.8	(±3.9)	17.3	(±2.7)
North Dakota	16.5	(±3.9)	11.5	(±3.4)	15.0	(±3.8)	23.3	(±4.6)	25.0	(±4.5)	29.2	(±4.1)¶
Ohio	9.6	(±3.2)	7.4	(±2.4)	17.2	(±4.0)	14.1	(±3.8)	19.5	(±3.9)	20.8	(±3.1)¶
Oklahoma	10.6	(±3.3)	12.9	(±4.0)	15.3	(±3.7)	11.0	(±2.6)	15.0	(±2.7)	19.4	(±2.9)¶
Oregon	18.5	(±3.1)	21.9	(±4.2)	22.8	(±4.9)	25.2	(±4.7)	26.0	(±3.5)	26.8	(±4.3)¶
Pennsylvania	17.3	(±2.8)	17.5	(±3.0)	18.5	(±3.1)	20.4	(±3.2)	21.0	(±3.1)	22.7	(±3.4)¶
Puerto Rico	35.0	(±6.9)	34.7	(±5.9)	33.8	(±6.1)	29.1	(±5.6)	29.8	(±5.8)	35.8	(±6.1)
Rhode Island	20.8	(±4.9)	19.2	(±5.1)	19.3	(±3.1)	19.9	(±3.0)	21.8	(±3.4)	26.6	(±3.5)**
South Carolina	12.1	(±3.5)	13.9	(±3.5)	20.7	(±3.2)	23.7	(±3.6)	24.8	(±4.0)	25.7	(±3.5)**
South Dakota	13.5	(±3.7)	22.6	(±4.3)	19.1	(±3.9)	21.6	(±3.1)	23.1	(±2.9)	25.7	(±3.2)¶
Tennessee	10.5	(±2.3)	12.1	(±2.5)	12.8	(±2.7)	11.8	(±2.6)	15.7	(±3.0)	19.0	(±3.3)¶
Texas	25.7	(±4.9)	27.9	(±4.4)	28.9	(±3.3)	33.3	(±4.0)	29.8	(±3.2)	30.7	(±2.9)
Utah	16.4	(±4.2)	19.2	(±4.8)	25.9	(±5.6)	26.4	(±5.5)	25.3	(±5.6)	31.2	(±5.1)¶
Vermont	21.7	(±6.4)	16.1	(±3.4)	16.6	(±3.2)	22.2	(±4.0)	22.9	(±3.8)	24.5	(±3.4)
Virgin Islands											27.7	(±6.8)††
Virginia	21.0	(±4.1)	23.1	(±4.8)	21.0	(±3.7)	19.5	(±3.4)	24.7	(±5.2)	20.9	(±3.6)
Washington	18.6	(±3.0)	22.0	(±4.0)	21.1	(±3.6)	23.9	(±3.3)	28.4	(±3.9)	26.6	(±3.1)¶
West Virginia	10.4	(±2.6)	10.6	(±2.5)	11.1	(±2.6)	12.3	(±2.7)	11.6	(±2.8)	16.4	(±2.8)¶
Wisconsin	20.8	(±4.3)	15.0	(±3.4)	20.0	(±4.5)	24.5	(±4.3)	24.7	(±4.0)	22.7	(±3.6)¶
Wyoming	18.2	(±3.3)	18.9	(±6.5)	17.0	(±3.4)	20.3	(±3.7)	23.5	(±3.9)	21.8	(±3.4)¶

* Persons aged ≥18 years who reported having smoked some days.

† Linear and quadratic trend analyses were conducted by using a logistic regression model controlling for sex, age, race/ethnicity, and education. Prevalence estimates were not standardized by demographic variables.

§ Confidence interval.

¶ Significant linear trend ($p < 0.05$).** Significant nonlinear trend ($p < 0.05$).

†† Guam and the Virgin Islands reported data for the first time in 2001.

risk for smoking. Second, data were based on self-reports, which might be subject to recall bias, and no biochemical verification was used to assess smoking status. However self-report generally has been found to be accurate in population-based surveys among adults. Third, the validity of self-report of every day versus some day smoking has not been assessed. Fourth, prevalence estimates and trend data could have been affected by low response rates. However, demographic characteristics of BRFSS responders are consistent with U.S. census data, and BRFSS estimates are comparable to estimates of current smoking obtained through analysis of other surveys with higher response rates (e.g., National Health Interview Survey [NHIS] data or data collected through the Tobacco Use Supplement of the Current Population Survey) (4). Fifth, the trend analysis was conducted by using data collected during 1996–2001; more recent data should be evaluated to verify trends found in this analysis. Finally, for some states (e.g., North Dakota), higher order models might be more appropriate.

The findings in this report document that even though current state-specific smoking rates have not declined significantly since 1996, the pattern of smoking has changed. Factors that might have contributed to the shift include increased retail price of cigarettes and smoking bans in public places (5,6). Massachusetts and California have reported other changes in smoking patterns. An independent evaluation of the Massachusetts Tobacco Control Program (7) reported a decline in smoking prevalence from 22.6% (95% CI = 21.3%–23.9%) in 1993 to 20.9% (95% CI = 18.4%–23.4%) in 1999, with a small but significant decline in the proportion of persons reporting smoking daily (81% in 1993 compared with 79% in 1999). Data collected through the California Tobacco Survey indicated that, along with overall decreases in prevalence of current smoking, the proportion of current smokers who were some day smokers increased significantly from 25.9% (95% CI = 22.6%–29.2%) in 1992 to 32.1% in 1996 (95% CI = 30.0%–34.2%) and from 32.1% in 1996 (95% CI = 30%–34.2%) to 36.4% in 1999 (95% CI = 34.3%–38.5%) (8).

The data in this report are consistent with characteristics of some day smokers observed in the 1997 and 1998 NHIS (9), except for the higher prevalence of some day smoking among men and the higher prevalence of some day smoking reported by respondents aged ≥ 65 years in BRFSS. Although some smokers appear to be reducing their cigarette consumption, results from a recent large cohort study indicate that reduction of daily tobacco consumption by $\geq 50\%$ without quitting did not decrease mortality rates from tobacco-related diseases compared with smokers who continued to smoke

heavily (≥ 15 cigarettes per day) (10). States are encouraged to implement comprehensive tobacco control programs such as those implemented in California and Massachusetts during the 1990s, which encourage smokers to stop smoking completely (7,8).

Acknowledgment

This report is based on data contributed by state BRFSS coordinators.

References

1. CDC. Annual smoking-attributable mortality, years of potential life lost, and economic costs—United States, 1995–1999. *MMWR* 2002;51:300–3.
2. U.S. Department of Health and Human Services. Healthy People 2010, 2nd ed. With Understanding and Improving Health and Objectives for Improving Health (2 vols). Washington, DC: U.S. Department of Health and Human Services, 2000.
3. CDC. State-specific prevalence of current cigarette smoking among adults, and policies and attitudes about secondhand smoke—United States, 2000. *MMWR* 2001;50:1101–6.
4. CDC. BRFSS data quality report. Available at <http://www.cdc.gov/brfss>.
5. U.S. Department of Agriculture. Tobacco Situation and Outlook Yearbook. Market and Trade Economics Division, Economic Research Service. Washington, DC: U.S. Department of Agriculture, 2001 (publication no. TBS-251:4).
6. Shopland DR, Gerlach KK, Burns DM, Hartman AM, Gibson JT. State-specific trends in smoke-free workplace policy coverage: the current population survey tobacco use supplement, 1993 to 1999. *J Occup Environ Med* 2001;43:680–6.
7. Massachusetts Department of Public Health. Independent evaluation of the Massachusetts tobacco control program: 6th annual report, January 1994–June 1999. Available at <http://www.state.ma.us/dph/mtcp/evaluat.htm>.
8. California Department of Health Services. The California Tobacco Control Program: A Decade of Progress. Results from the California Tobacco Survey, 1990–1999. Prepared by Cancer Prevention and Control Program. San Diego, California: University of California, 2001.
9. Wortley P, Husten C, Trosclair A, Chrismon J, Pederson LL. Non-daily smokers: a descriptive analysis. *Nicotine Tob Res* (in press).
10. Godtfredsen N, Holst C, Prescott E, Vestbo J, Osler M. Smoking reduction, smoking cessation, and mortality: a 16-year follow-up of 19,732 men and women from the Copenhagen Centre for Prospective Population Studies. *Am J of Epidemiol* 2001;156:994–1001.

Observational Survey of Smoking Provisions in Food Service Establishments — Southeast Health District, Georgia, 2001

In the United States, approximately 38,000 deaths are attributable to second hand smoke (SHS) exposure each year (1). One of the national health objectives for 2010 is to reduce public exposure to environmental tobacco smoke (ETS) (objective 27.10) (2). To reduce public exposure to ETS, CDC

recommends smoking bans and restrictions in public places (3). Some of the highest reported exposures to concentrations of SHS are found in food service establishments; however, Georgia does not have a state law prohibiting smoking in these places (4,5). In March 2001, the director of Georgia's Southeast Health District* requested assistance from the state health department in developing a surveillance system of smoking provisions in food service establishments. This report summarizes an observational survey of smoking provisions in food service establishments of Georgia's Southeast Health District in 2001, which found that although 69.4% (506) of all surveyed establishments were completely smoke free, the remaining establishments failed to provide several physical modifications designed to minimize ETS exposure. Public health officials in the Southeast Health District will use survey results to target interventions toward establishments lacking ETS-minimizing provisions.

A survey was developed to ascertain the status of smoking allowed on the premises and provisions to minimize exposure to ETS. Provisions included clear display of signs designating smoking and nonsmoking areas, nonadjacent smoking and

nonsmoking sections, barriers between smoking and nonsmoking sections, separate ventilation systems for smoking and nonsmoking sections, and the exclusion of common-use areas from the smoking section. The survey was completed by sanitarians at the time of their routine food safety inspections during June–December 2001. Descriptive analysis of data was conducted by using SAS.

The Southeast Health District has a population of 319,128 (6). During the study period, district sanitarians conducted routine inspections of 880 (94.8%) of the 928 eating establishments. Of these, 151 (17.1%) did not have indoor seating and were not eligible for the survey. Of the 729 inspected and surveyed establishments with indoor seating, 506 (69.4%) had a nonsmoking policy, 163 (22.3%) accommodated both smoking and nonsmoking patrons with separate sections, and 61 (8.4%) accommodated both smoking and nonsmoking patrons but did not have separate smoking and nonsmoking sections (Table 1).

Among the 163 establishments accommodating both smoking and nonsmoking patrons in separate seating sections, observance of provisions varied (Table 2). A total of 95 (58.3%) establishments clearly displayed nonsmoking section signs, and 63 (38.7%) clearly displayed signs for the smoking section. In addition, 43 (26.4%) had nonadjacent smoking and nonsmoking sections, 40 (24.5%) had physical barriers, 21 (12.9%) had separate ventilation systems to reduce ETS exposure, and 83 (50.9%) excluded common-use areas from the smoking section.

*The Southeast Health District of Georgia comprises 16 counties that share public health resources under district leadership. The health district oversees and manages the operational plans for the entire health district. Counties within the health district include Appling, Atkinson, Bacon, Brantley, Bulloch, Candler, Charlton, Clinch, Coffee, Evans, Jeff Davis, Pierce, Tattnall, Toombs, Ware, and Wayne Counties.

TABLE 1. Number of food service establishments, by county and types of smoking provisions — Southeast Health District, Georgia, 2001

County	Population size	Surveyed establishments	Total establishments*	100% nonsmoking		Separate smoking and nonsmoking sections		No separate sections	
				No.	(%)	No.	(%)	No.	(%)
Appling	17,419	35	41	19	(54.3%)	10	(28.6%)	6	(17.1%)
Atkinson	7,609	10	24	4	(40.0%)	1	(10.0%)	5	(50.0%)
Bacon	10,103	26	30	16	(61.5%)	4	(15.4%)	6	(23.1%)
Brantley	14,629	18	22	13	(72.2%)	5	(27.8%)	—	
Bulloch	55,983	149	165	101	(67.8%)	34	(22.8%)	15	(10.1%)
Candler	9,577	31	36	26	(83.9%)	5	(16.1%)	—	
Charlton	10,282	30	32	20	(66.7%)	1	(3.3%)	8	(26.7%)
Clinch	6,878	17	30	14	(82.4%)	3	(17.6%)	—	
Coffee	37,413	67	113	39	(58.2%)	27	(40.3%)	1	(1.5%)
Evans	10,495	30	34	21	(70.0%)	8	(26.7%)	1	(3.3%)
Jeff Davis	12,684	25	32	13	(52.0%)	7	(28.0%)	5	(20.0%)
Pierce	15,636	29	29	28	(96.6%)	1	(3.4%)	—	
Tattnall	22,305	41	41	31	(75.6%)	10	(24.4%)	—	
Toombs	26,067	76	99	54	(71.1%)	20	(26.3%)	2	(2.6%)
Ware	35,483	82	120	57	(69.5%)	17	(20.7%)	8	(9.8%)
Wayne	26,565	63	80	49	(77.8%)	10	(15.9%)	4	(6.3%)
Total	319,128	729	928	506	(69.4%)	163	(22.3%)	61	(8.4%)

*A total of 151 establishments did not have indoor seating and were not eligible for the survey.

TABLE 2. Provisions to minimize nonsmoker exposure to environmental tobacco smoke among food service establishments with smoking and nonsmoking sections — Southeast Health District, Georgia, 2001

Provision	Yes	(%)	No	(%)	Missing	(%)
Clearly displayed nonsmoking section signs	95	(58.3)	66	(40.5)	2	(1.2)
Clearly displayed smoking section signs	63	(38.7)	98	(60.1)	2	(1.2)
Nonadjacent smoking and nonsmoking sections	43	(26.4)	117	(71.8)	3	(1.8)
Barriers between smoking and nonsmoking sections	40	(24.5)	121	(74.2)	2	(1.2)
Separate ventilation for smoking and nonsmoking sections	21	(12.9)	134	(82.2)	8	(4.9)
Common-use areas excluded from smoking section	83	(50.9)	78	(47.9)	2	(1.2)

Reported by: JT Holloway, MD, LB Sweat, Southeast Health District; KE Powell, MD, D Kanny, PhD, Georgia Div of Public Health. RL Tan, DVM, EIS Officer, CDC.

Editorial Note: Because the majority of food service establishments in the Southeast Health District are completely smoke free, public health efforts in this district should focus on the remaining establishments (30.6%) still accommodating both smokers and nonsmokers. The Georgia Division of Public Health (GDPH) is conducting a survey to determine the presence and content of county tobacco ordinances. GDPH can then use eating establishment observational survey data to determine restaurant compliance with local ordinances, characterize ordinance noncompliance, and target areas for improvement.

The findings in this report are subject to at least three limitations. First, because 48 (5.2%) of the 928 eating establishments were not visited for routine inspections, they were not included in the data set. However, 83.7% of 777 eligible establishments were surveyed. Second, the survey was designed to observe physical provisions to minimize ETS and does not provide information about employee or patron compliance with clean indoor air practices. Finally, because approximately 20 sanitarians were working throughout the district, different interpretations of implementation of provisions included in the survey were possible. In addition, although the survey was intended to be observational, some data might have been collected through interviews with establishment management rather than through observation. These differences could reduce the comparability of data collected by different sanitarians. However, the survey was integrated with food safety inspections, was easy to administer, and provided a high rate of establishment coverage.

This survey was a practical instrument for ongoing surveillance of smoking provisions in food service establishments. Other than simple data entry, survey administration required no extra personnel and was completed quickly. The Southeast Health District will continue conducting surveys of establishments during routine food safety inspections. The

district plans to publish future survey results on a public access website and provide public recognition for establishments that become smoke free or install protective barriers to reduce public exposure to ETS. In addition, this surveillance system is being considered for use by other districts. The survey instrument is available at <http://health.state.ga.us/pdfs/epi/foodservicesmokingform.2002.pdf>.

This survey serves as the basis for a comprehensive program to assess and correct establishment noncompliance with county clean indoor air ordinances. Future actions include increasing public awareness of ETS exposure in food service establishments, encouraging establishments to voluntarily reduce exposure to their patrons, enforcing local clean indoor air ordinances, and tracking the district's success in ETS exposure reduction.

Acknowledgment

Data for this report were contributed by environmental health staff of the Southeast Health District of Georgia.

References

1. National Cancer Institute. Health effects of exposure to environmental tobacco smoke: the report of the California Environmental Protection Agency. Bethesda, Maryland: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute, 1999 (Monograph 10).
2. U.S. Department of Health and Human Services. Healthy People 2010, 2nd ed. With Understanding and Improving Health and Objectives for Improving Health (2 vols). Washington, DC: U.S. Department of Health and Human Services, 2000.
3. CDC. Strategies for reducing exposure to environmental tobacco smoke, increasing tobacco-use cessation, and reducing initiation in communities and health-care systems. MMWR 2000;49(RR-12).
4. U.S. Environmental Protection Agency. Respiratory health effects of passive smoking: lung cancer and other disorders. Cincinnati, Ohio: National Service Center for Environmental Publications, 1992 (EPA-600-6-90-006F).
5. CDC. Smokefree indoor air for restaurants. Available at http://www2.cdc.gov/nccdphp/osh/state/legislation_files/restaurant.asp.
6. U.S. Census Bureau. Census 2000 data for the state of Georgia. Available at <http://quickfacts.census.gov/qfd/states/13000.html>.

Point-of-Purchase Alcohol Marketing and Promotion by Store Type — United States, 2000–2001

Alcohol consumption is the third leading preventable cause of death in the United States, accounting for approximately 100,000 deaths annually (1). Efforts to reduce the adverse health and social consequences from alcohol use include policies to restrict access to alcohol among underaged persons (i.e., persons aged <21 years) and to reduce alcohol-impaired driving among persons of all ages (2). Recent studies have focused on alcohol marketing as a potentially important contributor to alcohol consumption, particularly among underage drinkers (3). Point-of-purchase (POP) (i.e., on-site) marketing, including alcohol advertising and placement, can increase alcohol sales and consumption substantially (4), thereby increasing the risk for various alcohol-related health outcomes, including alcohol-impaired driving and interpersonal violence (5–7). To assess the type and frequency of POP alcohol marketing, researchers with the ImpacTeen Project* collected and analyzed store observation data during 2000–2001 from 3,961 alcohol retailers in 329 communities throughout the United States. This report summarizes the results of the study, which indicate that POP alcohol marketing is extensive in certain store types frequented by teenagers and young adults. Public health agencies and policy makers should work with liquor control boards to reduce POP marketing that could promote risky or underage drinking.

Communities with one or more public schools that participated in either the 2000 or 2001 Monitoring the Future surveys (nationally representative surveys of 8th-, 10th-, and 12th-grade students) (8) were eligible to be included in the study. Private and magnet schools (comprising approximately 20% of the original sample) were not included in this study. Community boundaries were defined by the area from which each school drew $\geq 80\%$ of its student population. Retailers selling tobacco and alcohol products in each community were selected randomly for observation from lists of all potential alcohol and/or tobacco retailers as identified by their Standard Industrial Classification codes†. Of the total 6,031 observed stores, 3,961 (66%) were alcohol retailers and were included in this study.

In each alcohol retail establishment, field staff observed the presence of various POP alcohol marketing characteristics in a standardized manner, including 1) exterior and interior advertisements for alcoholic beverages and the intensity of such advertising, 2) alcohol beverage control signage (e.g., health warnings), 3) alcohol-branded functional objects provided free to retailers (e.g., counter change mats with an alcohol company logo), 4) beer placement (e.g., single cans or bottles chilled in buckets near checkout locations (Figure) or not chilled on shelf), and 5) the presence of low-height advertisements (i.e., advertisements placed within 3.5 feet of the floor, in the sight line of children and adolescents as opposed to adults).

The GENMOD procedure in SAS v.8 was used to determine generalized estimating equations that accounted for community clustering, specifying a binomial distribution and a logit link function. For all analyses, weights were included to account for community sampling procedures and store selection probabilities; supermarkets were the referent category.

The majority of stores (94%) had some form of POP alcohol marketing (i.e., store exterior, store interior, and/or parking lot or other property advertising and/or alcohol-branded functional objects). Exterior alcohol advertisements were observed in 39% of stores (Table 1); 27% of stores had high-intensity exterior advertising§. Compared with supermarkets,

§ Based on the exterior space available for advertising and on the number and size of advertisements.

FIGURE. Convenience store offering single bottles of beer chilled in bucket for sale near checkout location — North Carolina, 1999



Photo/Battelle Centers for Public Health Research and Evaluation, 1999

*A policy research partnership supported by the Robert Wood Johnson Foundation for reducing youth substance use. Member institutions include the University of Illinois at Chicago, the University of Michigan, Andrews University, and Roswell Park Cancer Institute.

†A numeric system used to classify U.S. industries and businesses for the collection, analysis, and dissemination of industry statistics developed by the Office of Management and Budget.

TABLE 1. Percentage of exterior and interior alcohol advertising, by store type* — United States, 2000–2001

Store type	Exterior alcohol advertisements: high-intensity† (N = 3,805)				Interior alcohol advertisements: high-intensity§ (N = 3,917)				Interior alcohol advertisements: low-height¶ (N = 3,960)			
	%	OR**	(95% CI††)	p value	%	OR	(95% CI)	p value	%	OR	(95% CI)	p value
Supermarket	0.9	1.0	(Referent)		11.6	1.0	(Referent)		30.1	1.0	(Referent)	
Convenience	29.3	48.2	(18.5–125.8)	p<0.001	33.7	3.9	(2.2–6.7)	p<0.001	33.7	1.2	(0.8–1.6)	
Convenience/Gas	26.6	42.3	(15.8–113.4)	p<0.001	38.4	4.8	(2.8–8.1)	p<0.001	48.2	2.2	(1.4–3.4)	p<0.001
Small grocery	17.3	24.5	(9.4–63.4)	p<0.001	31.3	3.5	(1.8–6.7)	p<0.001	35.5	1.3	(0.8–2.2)	
Drug store/Pharmacy	11.7	15.5	(5.3–45.2)	p<0.001	11.2	1.0	(0.5–1.8)		41.5	1.6	(0.8–3.3)	
Liquor store	60.3	176.8	(60.8–514.2)	p<0.001	70.7	18.5	(9.9–34.5)	p<0.001	68.9	5.1	(2.6–10.0)	p<0.001
Total	27.1				36.5				43.6			

* Supermarkets serve as the referent category in all odds ratios. The total for each analysis varies as noted above; the ranges of sample sizes by store type for the 2 years studied are as follows: supermarket, n = 487–495; convenience, n = 658–683; convenience/gas, n = 1,148–1,216; small grocery, n = 540–555; drug store/pharmacy, n = 186–191; liquor store, n = 589–617; and other, n = 197–203. "Other" store category is included in analyses but not shown in table.

† Based on the exterior space available for advertising and on the number and size of advertisements.

§ Outside of areas in which alcohol products are sold or displayed.

¶ Placed ≤3.5 feet above the floor level.

** Odds ratio.

†† Confidence interval.

liquor stores (odds ratio [OR] = 176.8), convenience stores (OR = 48.2), convenience/gas stores (OR = 42.3), small grocery stores (OR = 24.5), and drug stores/pharmacies (OR = 15.5) were more likely to have high-intensity exterior alcohol advertising.

Interior alcohol advertisements were observed in 92% of stores, and 37% of stores had high-intensity interior advertising[‡]. Liquor stores (OR = 18.5), convenience/gas stores (OR = 4.8), convenience stores (OR = 3.9), and small grocery stores (OR = 3.5) were more likely than supermarkets to have high-intensity interior advertisements. Low-height advertisements were found in 44% of stores. Low-height advertising was more common in liquor stores (OR = 5.1) and in convenience/gas stores (OR = 2.2) than in supermarkets. Less than half (48%) of the stores in the sample had alcohol control or counter-alcohol signage, with no statistically significant differences by store type.

Approximately half (51%) of the stores provided at least one alcohol-branded functional object. These objects were more likely to be in liquor stores (OR = 4.2), convenience stores (OR = 1.8), and small grocery stores (OR = 2.0) than in supermarkets (Table 2).

Among all types of stores, beer was located most commonly in coolers (96%), in floor displays (44%), on shelves (23%), and as singles in ice buckets (16%). Single beers in ice buckets, located most often near checkout locations, were most likely to be found in convenience stores (27%), convenience/gas stores (18%), and small grocery stores (27%) (Table 2). Shelf displays of beer were most common in supermarkets (47%) and drug stores (43%); 1% of stores placed beer behind a counter or in a closed or locked cabinet.

Reported by: YM Terry-McElrath, MSA, Univ of Michigan, Ann Arbor. EM Harwood, PhD, AC Wagenaar, PhD, Univ of Minnesota, Minneapolis. S Slater, MS, FJ Chaloupka, PhD, Univ of Illinois at Chicago. RD Brewer, MD, TS Naimi, MD, Div of Adult and Community Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

[‡] Advertising outside of areas where alcohol products were sold or displayed.

TABLE 2. Percentage of alcohol-branded functional objects and beer product placement, by store type* — United States, 2000–2001

Store type	Alcohol-branded functional objects† (N = 3,958)				Beer singles in ice bucket§ (N = 3,810)				Beer on shelf¶ (N = 3,810)			
	%	OR**	(95% CI††)	p value	%	OR	(95% CI)	p value	%	OR	(95% CI)	p value
Supermarket	38.7	1.0	(Referent)		4.3	1.0	(Referent)		47.5	1.0	(Referent)	
Convenience	53.7	1.8	(1.3–2.6)	p<0.01	27.0	8.2	(5.5–12.2)	p<0.001	14.7	0.2	(0.1–0.3)	p<0.001
Convenience/Gas	50.0	1.6	(0.6–4.4)		17.7	4.7	(1.6–14.1)	p<0.01	14.0	0.2	(0.1–0.3)	p<0.001
Small grocery	55.5	2.0	(1.3–3.1)	p<0.01	26.9	8.1	(5.0–13.2)	p<0.001	17.8	0.2	(0.1–0.5)	p<0.001
Drug store/Pharmacy	11.2	0.2	(0.1–0.8)	p<0.05	5.0	1.2	(0.2–6.0)		43.0	0.8	(0.5–1.4)	
Liquor store	72.5	4.2	(1.2–14.5)	p<0.05	4.8	1.1	(0.3–4.0)		32.7	0.5	(0.3–0.9)	p<0.05
Total	50.9				15.9				23.2			

* Supermarkets serve as the referent category in all odds ratios. The total for each analysis varies as noted above; the ranges of sample sizes by store type for the 2 years studied are as follows: supermarket, n = 492–495; convenience, n = 676–683; convenience/gas, n = 1,200–1,216; small grocery, n = 548–555; drug store/pharmacy, n = 189–190; liquor store, n = 507–616; and other, n = 198–203. "Other" store category is included in analyses but not shown in table.

† Free items displaying alcohol company logos (e.g., floor or counter mats).

§ Convenience placement, usually near checkout counter or exit/entrance to store.

¶ Open-store shelving, not chilled.

** Odds ratio.

†† Confidence interval.

Editorial Note: The findings in this report indicate that POP alcohol marketing is extensive in stores frequented by U.S. teenagers and young adults. POP marketing was found in >90% of stores, and 44% of stores had low-height interior alcohol advertising. Although liquor stores generally had the most aggressive POP marketing strategy, convenience stores (with or without gasoline) and small grocery stores had the most accessible alcohol products and were the most likely to sell chilled single beers in buckets. Alcohol control signage was displayed in <50% of stores, and almost no stores kept beer in locked cabinets or behind the counter.

POP marketing can increase total beer sales by as much as 17% (4) and influences consumer purchase behavior, with 70% of a buyer's purchasing choice occurring after the buyer enters the retail establishment (4). Persons aged 21–27 years are more likely to purchase beer in convenience stores and liquor stores than in supermarkets and drug stores (9), and 75% of teenagers shop at convenience or convenience/gas stores weekly (10). Therefore, aggressive POP marketing in convenience and liquor stores might influence young adults, underage persons, and adolescents disproportionately. These age groups also have the highest rates of binge drinking and alcohol-impaired driving (1). The findings in this report are subject to at least two limitations. First, the communities and

retail stores included in this study might not be representative of all communities and stores in the United States. Second, although retailer selection was random, no effort was made to ensure that the various store types were represented proportionally.

Few POP alcohol marketing guidelines exist. Given the efficacy and widespread use of POP alcohol marketing, policy makers and public health agencies should work with liquor control boards to curb sales practices that could either increase risky drinking (e.g., selling iced single beers, particularly near checkout counters, which might increase drinking and driving) or promote drinking among young adults, adolescents, and children (e.g., high-intensity or low-height advertising).

References

1. Naimi TS, Brewer RD, Mokdad A, Denny C, Serdula MK, Marks JS. Binge drinking among U.S. Adults. *JAMA* 2003;289:70–5.
2. Alcohol Epidemiology Program. Alcohol policies in the United States: highlights from the 50 states. Minneapolis, Minnesota: University of Minnesota, 2000. Available at <http://www.epi.umn.edu/alcohol/pdf/chrtbook.pdf>.
3. Center on Alcohol Marketing and Youth. Overexposed: youth a target of alcohol advertising in magazines. Washington, DC: Center on Alcohol Marketing and Youth, 2002. Available at <http://camy.org/research/mag0902>.
4. Beverage Industry. POP proves its worth. *Beverage Industry* 2001;92:44–7.

e xperience.

For over 50 years, MMWR has been the key provider of up-to-date public health reports and news. All of our publications—the Weekly, Recommendations and Reports, and Surveillance Summaries—are available online, free of charge.

Visit cdc.gov/mmwr and experience timely public health information from a trusted source.

know what matters.



5. Grossman M, Chaloupka FJ, Saffer H, Laixuthai A. Effects of alcohol price policy on youth: a summary of economic research. *Journal of Research on Adolescence* 1994;4:347–64.
6. Stout EM, Sloan FA, Liang L, Davies HH. Reducing harmful alcohol-related behaviors: effective regulatory methods. *J Stud Alcohol* 2000;61:402–12.
7. Skog O. An experimental study of a change from over-the-counter to self-service sales of alcoholic beverages in monopoly outlets. *J Stud Alcohol* 2000;61:95–100.
8. Bachman JG, Johnston LD, O'Malley PM. The Monitoring the Future Project after twenty-seven years: design and procedures. Ann Arbor, Michigan: Institute for Social Research, University of Michigan, 2001 (Monitoring the Future Occasional Paper No. 54).
9. Miller Brewing Company. Beer is Volume with Profit. Milwaukee, Wisconsin: Miller Brewing Company, 1997.
10. Point of Purchase Advertising Institute. The Point-of-Purchase Advertising Industry Fact Book. Englewood, New Jersey: The Point of Purchase Advertising Institute, 1992.

Update on Adverse Events Following Civilian Smallpox Vaccination — United States, 2003

During January 24–April 4, 2003, smallpox vaccine was administered to 31,297 civilian health-care and public health workers in 54 jurisdictions as part of an effort to prepare the United States for a possible terrorist attack using smallpox virus. This report updates information on all vaccine-associated adverse events among civilians vaccinated since the beginning of the smallpox vaccination program and among contacts of vaccinees, received by CDC from the Vaccine Adverse Event Reporting System (VAERS) as of April 4.

In this vaccination program, CDC, the Food and Drug Administration, and state health departments are conducting surveillance for vaccine-associated adverse events among civilian vaccinees (1). As part of the vaccination program, civilian vaccinees receive follow-up care, and reported adverse events after vaccination receive necessary medical attention. The U.S. Department of Defense is conducting surveillance for vaccine-associated adverse events among military vaccinees.

Adverse events that have been associated with smallpox vaccination are classified based upon evidence supporting the reported diagnoses. Cases verified by virologic testing are classified as confirmed. Cases are classified as probable if possible alternative etiologies are investigated and supportive information is found. Cases are classified as suspected if they have clinical features compatible with the diagnosis, but either further investigation is required or investigation of the case did not provide supporting evidence for the diagnosis and did not identify an alternative diagnosis. All reports of events that follow vaccination are accepted (i.e., events temporally associated); however, reported adverse events are not necessarily associated causally with vaccination, and some or all of these events might be coincidental.

As of April 4, seven cases of myopericarditis have been reported (Table 1). Three are new reports and were received during March 31–April 4.

Case Reports

Case 1. A man aged 52 years with no history of cardiac disease or risk factors for cardiac disease was revaccinated on March 21. On March 29, he had left-side chest pain that was

TABLE 1. Number of cases* of selected adverse events associated with smallpox vaccination among civilians, by type — United States, January 24–April 4, 2003

Adverse events	No. new cases (March 31–April 4)			Total no. cases (January 24–April 4)		
	Suspected†	Probable§	Confirmed¶	Suspected	Probable	Confirmed
Eczema vaccinatum	—**	—	—	—	—	—
Erythema multiforme major (Stevens-Johnson syndrome)	—	—	NA††	—	—	NA
Fetal vaccinia	—	—	—	—	—	—
Generalized vaccinia	—	—	—	6	—	1
Inadvertent inoculation, nonocular	5	—	—	20	—	2
Myocarditis/pericarditis	2	1	—	3	4	—
Ocular vaccinia	—	—	—	—	—	2
Postvaccinial encephalitis or encephalomyelitis	—	—	NA	—	—	NA
Progressive vaccinia	—	—	—	—	—	—
Pyogenic infection of vaccination site	—	—	—	—	—	—

* Under investigation or completed as of April 4, 2003; numbers and classifications of adverse events will be updated regularly in *MMWR* as more information becomes available.

† Events are classified as suspected if they have clinical features compatible with the diagnosis but either further investigation is required or additional investigation of the case did not provide supporting evidence for the diagnosis and did not identify an alternative diagnosis.

§ Events are classified as probable if possible alternative etiologies are investigated and supportive information is found.

¶ Events are classified as confirmed if virologic tests are positive.

** No cases reported.

†† Not applicable.

exacerbated by reclining and relieved by sitting. He also reported fever, fatigue, myalgias, and axillary lymphadenopathy. On April 1, a white blood cell count indicated 5.4% eosinophils, cardiac enzyme tests and electrocardiogram (ECG) were normal, and an echocardiogram indicated no effusion or decreased contractility. Suspected pericarditis was diagnosed. Investigation of this case is ongoing.

Case 2. A woman aged 49 years was revaccinated on March 24 and had sharp intermittent left-side chest pain 2 days later. On March 30, she reported chest pain radiating to the left side of her neck and left ear. She was admitted to the hospital for 1 day. Cardiac enzyme tests and an ECG were negative. On discharge she still had mild chest pain, which worsened on April 4 and was accompanied by shortness of breath. On the same day, she was readmitted to the hospital for 2 days. Repeat ECG showed T-wave abnormalities suggestive of pericarditis, and echocardiogram was normal. Results of a thallium stress test and cardiology follow-up visit are pending.

Case 3. A man aged 46 years with a history of acute myocardial infarction (MI) in 1997 reported chest pain during the 3 days before vaccination; he was revaccinated on March 19. Later that evening, he had diaphoresis and his chest pain worsened; he reported to an emergency department. A non-Q wave MI was diagnosed. The patient underwent heart catheterization and angioplasty and received three stents. He was discharged and is well.

No new cases of generalized vaccinia were reported, but five new cases of inadvertent inoculation (nonocular) were reported. No new ocular vaccinia cases were reported. During the vaccination program, no cases of eczema vaccinatum, erythema multiforme major, fetal vaccinia, post-vaccinial encephalitis or encephalomyelitis, progressive vaccinia, or pyogenic infection of the vaccination site have been reported (Table 1).

During March 31–April 4, a total of ten other serious adverse events were reported: one case of acute appendicitis, one case of pneumonia, five cases of atypical chest pain, one case of atypical chest pain with mild asthma, one case of new onset atrial fibrillation, and one case of MI (Case 3) (Table 2). Four cases of acute MI were reported previously (2,3).

During March 31–April 4, a total of 58 other nonserious events were reported (Table 2). Among the 250 vaccinees with reported other nonserious adverse events during January 24–April 4 (Table 2), the most common signs and symptoms were rash ($n = 53$), fever ($n = 52$), headache ($n = 41$), pruritus ($n = 39$), and pain ($n = 36$). All of these commonly reported events are consistent with mild expected reactions following receipt of smallpox vaccine. Some vaccinees reported multiple signs and symptoms.

TABLE 2. Number of cases* of other adverse events reported after smallpox vaccination among civilians, by severity — United States, January 24–April 4, 2003

Adverse events	No. new cases (March 31– April 4)	Total no. cases (January 24– April 4)
Other serious adverse events†	10§	30
Other nonserious adverse events¶	58	250

* Under investigation or completed as of April 4, 2003; numbers and classifications of adverse events will be updated regularly in *MMWR* as more information becomes available.

† Events that result in hospitalization, permanent disability, life-threatening illness, or death. These events are temporally associated with vaccination, but are not necessarily causally associated with vaccination.

§ Include myocardial infarction ($n = 1$), atypical chest pain ($n = 5$), atypical chest pain with mild asthma ($n = 1$), new onset atrial fibrillation ($n = 1$), acute appendicitis ($n = 1$), and pneumonia ($n = 1$).

¶ Include expected self-limited responses to smallpox vaccination (e.g., fatigue, headache, pruritis, local reaction at vaccination site, regional lymphadenopathy, lymphangitis, fever, myalgias and chills, and nausea); additional events are temporally associated with smallpox vaccination but are not necessarily causally associated with vaccination.

During this reporting period, no vaccinia immune globulin was released for civilian vaccinees. No cases of transmission from civilian vaccinees have been reported. In addition, no cases of transmission from 19,508 health-care workers, 8,999 of whom have been followed for >1 month, have been reported (Table 3). Seven cases of transmission from military personnel to civilian contacts have been reported.

Surveillance for adverse events during the civilian and military smallpox vaccination programs is ongoing; regular surveillance reports will be published in *MMWR*.

Reported by: Smallpox vaccine adverse events coordinators. National Immunization Program, CDC.

Editorial Note: The first two case descriptions illustrate the variability in presentation of possible myopericarditis reports. Case 1 demonstrates the difficulty of diagnosing myopericarditis when symptoms are present but cardiac enzyme tests, ECG, and echocardiogram are negative. CDC, in consultation with clinical cardiologists, is developing standardized case definitions and guidelines for evaluation and follow-up of patients with possible myopericarditis.

TABLE 3. Vaccinia immune globulin release and vaccinia transmission to contacts — United States, January 24–April 4, 2003

Events	No. new cases (March 31– April 4)	Total no. cases (January 24– April 4)
Vaccinia immune globulin release	0	1
Vaccinia transmission to contacts*		
Health care settings	0	0
Other settings	0	0

* No cases of transmission from civilian vaccinees have been reported.

The patient in Case 3, who had chest pain before vaccination and on the day of vaccination, demonstrates the difficulty of assessing causality; ischemic heart events are common and might coincide with vaccination. Both viral replication and immunologic response to the vaccine are unlikely to occur on the day of vaccination. In this case, MI is unlikely to be a direct result of vaccination; however, investigation is ongoing.

References

1. CDC. Smallpox Vaccine Adverse Events Monitoring and Response System for the first stage of the smallpox vaccination program. *MMWR* 2002;52:88–9.
2. CDC. Update: adverse events following smallpox vaccination—United States, 2003. *MMWR* 2003;52:278–82.
3. CDC. Supplemental recommendations of adverse events following smallpox vaccine in the pre-event vaccination program: recommendations of the Advisory Committee on Immunization Practices. *MMWR* 2003;52:282–4.

Notice to Readers

National Infant Immunization Week — April 13–19, 2003

National Infant Immunization Week (NIIW) is April 13–19, 2003; this year's theme is "Love Them. Protect Them. Immunize Them." This week emphasizes the importance of timely infant and childhood vaccination. Vaccination is one of the most effective ways to protect children, especially infants and young children, from potentially serious diseases. Because of increased vaccination efforts in the United States, incidences of the majority of vaccine-preventable diseases have decreased approximately 99% from peak pre-vaccine levels (1). In 2002, a total of 37 measles cases, one diphtheria case, and no wild poliovirus cases were reported (2,3). Approximately 11,000 babies are born each day in the United States; they need approximately 20 doses of vaccine before age 2 years to protect them from 11 vaccine-preventable diseases (4). Although vaccination coverage levels are high for children of preschool-age, approximately 1 million children aged 2 years are missing ≥ 1 recommended vaccine doses (5).

During NIIW, states and communities will sponsor activities designed to highlight the need to achieve and maintain high childhood vaccination coverage rates. In addition, CDC will launch a new television public service announcement in English and Spanish and a Spanish-language immunization education booklet. Additional information about NIIW and childhood vaccinations is available from CDC's National Immunization Program at <http://www.cdc.gov/nip> or the National Immunization Information Hotline, telephone 800-232-2522 (English) or 800-232-0233 (Spanish).

References

1. CDC. Achievements in public health, 1900–1999: Impact of vaccines universally recommended for children—United States, 1990–1998. *MMWR* 1999;48:243–8.
2. CDC. Table I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending December 28, 2002 (52nd week). *MMWR* 2003;51:1165.
3. CDC. Table II. Provisional cases of selected notifiable diseases, United States, weeks ending December 28, 2002, and December 29, 2002 (52nd week). *MMWR* 2003;51:1166–74.
4. CDC. Recommended childhood and adolescent immunization schedule—United States, 2003. *MMWR* 2003;52:Q1–Q4.
5. CDC. National, state, and urban area vaccination coverage levels among children aged 19–35 months—United States, 2001. *MMWR* 2002;51:664–6.

Notice to Readers

Epi Info 2002: A Course for Developers of Public Health Information Systems

CDC and Emory University's Rollins School of Public Health will co-sponsor a course, "Developing Public Health Software Applications Using Epi Info 2002" during May 13–16, 2003, at Emory University. The course is designed for practitioners of epidemiology and computing with intermediate to advanced skills in computing who wish to develop software applications by using Epi Info 2002 for Windows 95, 98, NT, 2000, and XP.

The course covers hands-on experience with operating the new Windows version of Epi Info, programming Epi Info software at the intermediate to advanced level, and using computerized interactive exercises for developing public health information systems. There is a tuition charge. Application deadline is April 30 or until filled.

Additional information and applications are available at <http://www.sph.emory.edu/epicourses>; by telephone, 404-727-3485; by fax, 404-727-4590; or by e-mail, pvaleri@sph.emory.edu.

Notice to Readers

Introduction to Public Health Surveillance Course

CDC and Emory University's Rollins School of Public Health will co-sponsor a course, "Introduction to Public Health Surveillance" during June 9–13, 2003, at Emory University. The course is designed for state and local public health professionals.

The course will provide practicing public health professionals with the theoretical and practical tools necessary to design, implement, and evaluate effective surveillance programs.

Topics include overview and history of surveillance systems; planning considerations; sources and collection of data; analysis, interpretation, and communication of data; surveillance systems technology; ethics and legalities; state and local concerns; and future considerations. There is a tuition charge. Application deadline is May 1 or until filled.

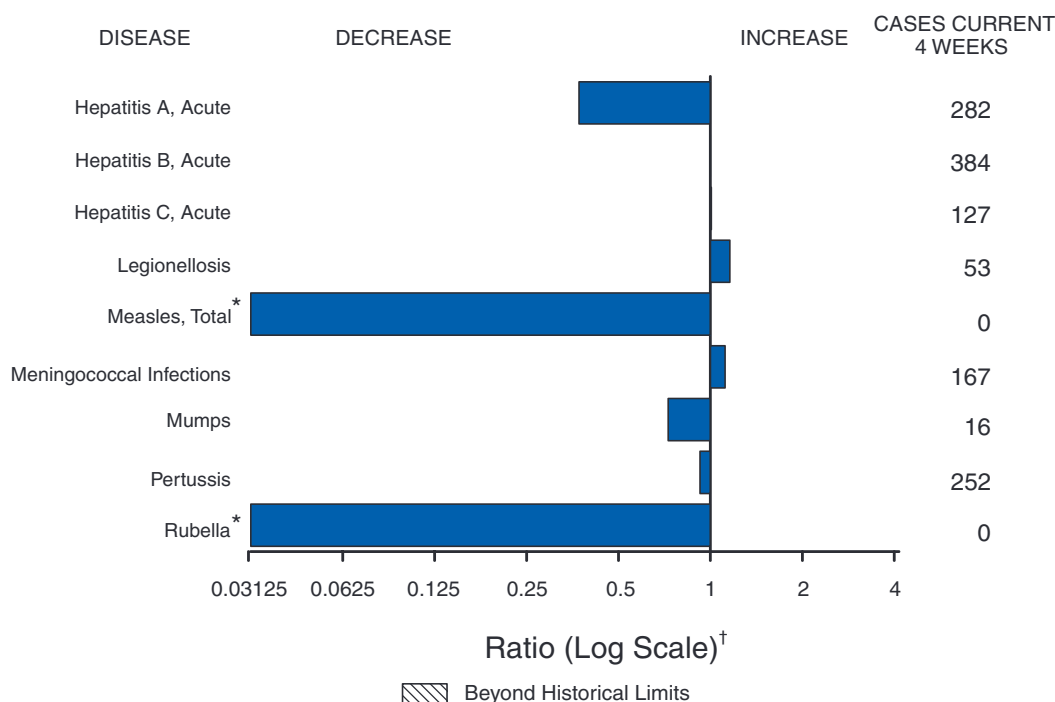
Additional information and applications are available at <http://www.sph.emory.edu/epicourses>; by telephone, 404-727-3485; by fax 404-727-4590; or by e-mail, pvaleri@sph.emory.edu.

Notice to Readers

2003 Conference on Antimicrobial Resistance

The 2003 Conference on Antimicrobial Resistance will be held during June 23–25, 2003, in Bethesda, Maryland. The conference is sponsored by the National Foundation for Infectious Diseases (NFID) in collaboration with nine agencies, institutes, and organizations involved in conducting and/or promoting research, prevention, and control of antimicrobial resistance.

Program announcements and forms for registration and hotel reservations are available at <http://www.nfid.org/conferences/resistance03> and from NFID, 4733 Bethesda Avenue, Suite 750, Bethesda, Maryland 20814-5278; telephone, 301-656-0003 (ext. 12); fax, 301-907-0878; and e-mail, resistance@nfid.org.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending April 5, 2003, with historical data

* No measles or rubella cases were reported for the current 4-week period yielding a ratio for week 14 of zero (0).

[†] Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending April 5, 2003 (14th Week)*

	Cum. 2003	Cum. 2002		Cum. 2003	Cum. 2002
Anthrax	-	1	Hansen disease (leprosy) [†]	18	22
Botulism:	-	-	Hantavirus pulmonary syndrome [†]	4	-
foodborne	3	4	Hemolytic uremic syndrome, postdiarrheal [†]	28	24
infant	13	21	HIV infection, pediatric ^{‡§}	82	50
other (wound & unspecified)	7	6	Measles, total	3 [¶]	8**
Brucellosis [†]	12	20	Mumps	58	81
Chancroid	10	17	Plague	-	-
Cholera	-	1	Poliomyelitis, paralytic	-	-
Cyclosporiasis [†]	10	26	Psittacosis [†]	2	11
Diphtheria	-	-	Q fever [†]	14	11
Ehrlichiosis:	-	-	Rabies, human	-	1
human granulocytic (HGE) [†]	8	11	Rubella	-	1
human monocytic (HME) [†]	8	8	Rubella, congenital	-	2
other and unspecified	-	-	Streptococcal toxic-shock syndrome [†]	42	38
Encephalitis/Meningitis:	-	-	Tetanus	1	5
California serogroup viral [†]	-	-	Toxic-shock syndrome	27	40
eastern equine [†]	-	-	Trichinosis	2	4
Powassan [†]	-	-	Tularemia [†]	4	5
St. Louis [†]	-	-	Yellow fever	-	1
western equine [†]	-	-			

-: No reported cases.

* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

[†] Not notifiable in all states.

[§] Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last update March 30, 2003.

[¶] Of three cases reported, two were indigenous and one was imported from another country.

** Of eight cases reported, four were indigenous and four were imported from another country.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending April 5, 2003, and April 6, 2002 (14th Week)*

Reporting area	AIDS		Chlamydia†		Coccidiomycosis		Cryptosporidiosis		Encephalitis/Meningitis West Nile	
	Cum. 2003§	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	8,731	10,819	194,470	210,729	978	1,050	402	580	-	-
NEW ENGLAND	280	324	7,021	7,161	-	-	24	22	-	-
Maine	-	1	249	380	N	N	2	-	-	-
N.H.	5	9	396	437	-	-	-	5	-	-
Vt.	5	6	294	198	-	-	5	5	-	-
Mass.	50	177	2,869	2,852	-	-	11	6	-	-
R.I.	30	35	822	733	-	-	4	3	-	-
Conn.	190	96	2,391	2,561	N	N	2	3	-	-
MID. ATLANTIC	2,050	2,206	16,547	23,284	-	-	42	85	-	-
Upstate N.Y.	116	166	4,553	3,642	N	N	16	14	-	-
N.Y. City	1,179	1,353	3,447	7,968	-	-	11	37	-	-
N.J.	237	406	2,776	3,569	-	-	3	5	-	-
Pa.	518	281	5,771	8,105	N	N	12	29	-	-
E.N. CENTRAL	768	1,051	31,090	38,094	2	6	76	164	-	-
Ohio	118	198	7,136	10,429	-	-	16	38	-	-
Ind.	128	145	4,142	4,579	N	N	6	13	-	-
Ill.	311	528	8,486	10,359	-	1	7	32	-	-
Mich.	172	124	7,240	8,221	2	5	19	28	-	-
Wis.	39	56	4,086	4,506	-	-	28	53	-	-
W.N. CENTRAL	171	175	12,218	11,674	-	-	41	49	-	-
Minn.	26	33	2,362	2,791	N	N	23	16	-	-
Iowa	26	42	1,109	1,103	N	N	7	5	-	-
Mo.	86	53	4,585	3,844	-	-	2	9	-	-
N. Dak.	-	1	331	319	N	N	1	2	-	-
S. Dak.	3	4	650	571	-	-	6	3	-	-
Nebr.	10	17	1,237	1,023	-	-	2	11	-	-
Kans.	20	25	1,944	2,023	N	N	-	3	-	-
S. ATLANTIC	2,326	3,692	40,251	39,024	1	-	78	118	-	-
Del.	31	62	813	706	N	N	1	1	-	-
Md.	62	441	4,427	4,128	1	-	7	3	-	-
D.C.	184	172	741	919	-	-	-	2	-	-
Va.	228	254	4,408	4,351	-	-	7	1	-	-
W. Va.	8	25	652	648	N	N	-	1	-	-
N.C.	222	268	6,434	5,431	N	N	10	13	-	-
S.C.	166	285	3,626	3,570	-	-	1	2	-	-
Ga.	228	667	8,881	8,381	-	-	33	62	-	-
Fla.	1,197	1,518	10,269	10,890	N	N	19	33	-	-
E.S. CENTRAL	368	440	13,672	14,429	N	N	27	29	-	-
Ky.	21	55	2,272	2,430	N	N	6	1	-	-
Tenn.	176	195	4,871	4,481	N	N	7	13	-	-
Ala.	79	94	3,404	4,533	-	-	12	13	-	-
Miss.	92	96	3,125	2,985	N	N	2	2	-	-
W.S. CENTRAL	1,087	1,113	25,930	28,660	-	-	5	10	-	-
Ark.	38	61	1,707	1,894	-	-	1	2	-	-
La.	138	267	3,967	4,751	N	N	-	2	-	-
Okla.	53	51	2,260	2,733	N	N	1	2	-	-
Tex.	858	734	17,996	19,282	-	-	3	4	-	-
MOUNTAIN	378	342	10,809	12,692	710	671	22	30	-	-
Mont.	6	4	410	542	N	N	2	1	-	-
Idaho	2	6	731	642	N	N	4	9	-	-
Wyo.	2	4	276	218	-	-	1	4	-	-
Colo.	79	76	2,290	3,679	N	N	5	6	-	-
N. Mex.	33	13	818	2,157	-	4	-	3	-	-
Ariz.	175	137	3,789	3,806	699	656	3	4	-	-
Utah	45	18	1,045	9	1	2	5	1	-	-
Nev.	36	84	1,450	1,639	10	9	2	2	-	-
PACIFIC	1,303	1,476	36,932	35,711	265	373	87	73	-	-
Wash.	97	162	4,061	3,712	N	N	-	-	-	-
Oreg.	52	129	1,918	1,798	-	-	8	8	-	-
Calif.	1,140	1,167	28,932	28,154	265	373	79	64	-	-
Alaska	9	2	878	935	-	-	-	-	-	-
Hawaii	5	16	1,143	1,112	-	-	-	1	-	-
Guam	2	-	-	-	-	-	-	-	-	-
P.R.	61	279	247	12	N	N	N	N	-	-
V.I.	2	52	-	51	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

† Chlamydia refers to genital infections caused by *C. trachomatis*.

§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update March 30, 2003.

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 5, 2003, and April 6, 2002 (14th Week)*

Reporting area	Escherichia coli, Enterohemorrhagic (EHEC)						Giardiasis		Gonorrhea	
	O157:H7		Shiga toxin positive, serogroup non-O157		Shiga toxin positive, not serogrouped					
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	226	326	31	13	13	2	3,375	4,586	75,625	91,786
NEW ENGLAND	12	25	4	1	-	1	185	423	1,805	2,176
Maine	-	-	-	-	-	-	21	44	21	22
N.H.	3	2	-	-	-	-	13	16	29	35
Vt.	-	1	-	-	-	-	18	28	27	25
Mass.	4	14	-	1	-	1	103	224	703	956
R.I.	1	2	-	-	-	-	29	18	266	254
Conn.	4	6	4	-	-	-	1	93	759	884
MID. ATLANTIC	14	27	1	-	4	-	566	1,013	6,952	10,767
Upstate N.Y.	8	21	1	-	4	-	190	240	1,782	1,984
N.Y. City	2	-	-	-	-	-	265	417	1,540	3,262
N.J.	4	6	-	-	-	-	48	123	1,497	2,093
Pa.	N	N	-	-	-	-	63	233	2,133	3,428
E.N. CENTRAL	48	102	7	-	2	-	533	796	15,028	18,835
Ohio	14	16	7	-	2	-	200	226	4,376	5,633
Ind.	6	7	-	-	-	-	-	-	1,599	2,093
Ill.	7	30	-	-	-	-	110	224	4,173	5,713
Mich.	11	21	-	-	-	-	167	219	3,422	3,879
Wis.	10	28	-	-	-	-	56	127	1,458	1,517
W.N. CENTRAL	34	44	3	4	5	-	364	409	4,194	4,763
Minn.	13	13	3	3	-	-	117	157	603	845
Iowa	3	8	-	-	-	-	58	61	220	286
Mo.	10	12	N	N	N	N	100	103	2,211	2,302
N. Dak.	1	-	-	-	1	-	8	3	10	17
S. Dak.	2	1	-	-	-	-	12	17	36	68
Nebr.	4	7	-	1	-	-	40	33	405	386
Kans.	1	3	-	-	4	-	29	35	709	859
S. ATLANTIC	32	39	8	5	-	-	634	714	20,305	23,412
Del.	-	2	N	N	N	N	14	14	351	447
Md.	-	-	-	-	-	-	28	28	2,172	2,319
D.C.	1	-	-	-	-	-	6	12	551	759
Va.	3	5	-	-	-	-	60	36	2,167	2,833
W. Va.	1	-	-	-	-	-	7	9	225	264
N.C.	7	6	-	-	-	-	N	N	3,616	4,379
S.C.	-	-	-	-	-	-	22	6	2,031	2,053
Ga.	9	21	1	4	-	-	262	225	4,518	4,537
Fla.	11	5	7	1	-	-	235	384	4,674	5,821
E.S. CENTRAL	11	7	-	-	-	-	72	78	6,824	8,154
Ky.	2	2	-	-	-	-	N	N	930	940
Tenn.	5	4	-	-	-	-	30	33	2,167	2,491
Ala.	3	-	-	-	-	-	42	45	2,095	2,899
Miss.	1	1	-	-	-	-	-	-	1,632	1,824
W.S. CENTRAL	5	8	2	-	1	1	51	26	10,755	12,915
Ark.	2	1	-	-	-	-	30	26	996	1,199
La.	-	-	-	-	-	-	3	-	2,530	3,015
Okla.	-	-	-	-	-	-	18	-	901	1,182
Tex.	3	7	2	-	1	1	-	-	6,328	7,519
MOUNTAIN	28	24	5	1	1	-	312	309	2,467	2,930
Mont.	1	4	-	-	-	-	11	17	29	33
Idaho	8	1	3	-	-	-	41	9	25	26
Wyo.	-	-	-	1	-	-	4	3	13	16
Colo.	8	2	1	-	1	-	84	116	667	1,017
N. Mex.	-	2	1	-	-	-	12	33	164	402
Ariz.	8	4	N	N	N	N	60	46	1,040	936
Utah	3	5	-	-	-	-	71	50	96	2
Nev.	-	6	-	-	-	-	29	35	433	498
PACIFIC	42	50	1	2	-	-	658	818	7,295	7,834
Wash.	14	6	-	-	-	-	39	59	761	817
Oreg.	4	17	1	2	-	-	77	115	247	245
Calif.	24	24	-	-	-	-	498	591	5,915	6,459
Alaska	-	-	-	-	-	-	21	20	142	167
Hawaii	-	3	-	-	-	-	23	33	230	146
Guam	N	N	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	4	-	23	4
V.I.	-	-	-	-	-	-	-	-	-	18
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 5, 2003, and April 6, 2002 (14th Week)*

Reporting area	<i>Haemophilus influenzae</i> , invasive								Hepatitis (viral, acute), by type	
	All ages		Age <5 years						A	
	All serotypes		Serotype B		Non-serotype B		Unknown serotype			
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	378	552	2	5	60	96	7	6	1,357	2,757
NEW ENGLAND	31	38	-	-	2	4	1	2	46	105
Maine	2	1	-	-	1	-	-	-	3	4
N.H.	5	4	-	-	-	-	-	-	3	6
Vt.	5	3	-	-	-	-	-	-	1	-
Mass.	11	20	-	-	1	2	1	2	26	55
R.I.	1	-	-	-	-	-	-	-	4	4
Conn.	7	10	-	-	-	2	-	-	9	36
MID. ATLANTIC	57	111	-	1	11	16	1	-	161	364
Upstate N.Y.	26	43	-	1	7	7	-	-	24	49
N.Y. City	8	30	-	-	3	6	-	-	89	187
N.J.	12	28	-	-	1	3	-	-	29	56
Pa.	11	10	-	-	-	-	1	-	19	72
E.N. CENTRAL	33	107	1	1	5	18	-	-	143	320
Ohio	17	35	-	-	4	4	-	-	34	80
Ind.	10	14	-	-	1	4	-	-	6	12
Ill.	1	35	-	-	-	6	-	-	40	120
Mich.	5	5	1	1	-	-	-	-	54	66
Wis.	-	18	-	-	-	4	-	-	9	42
W.N. CENTRAL	27	14	-	-	4	1	2	2	44	108
Minn.	12	11	-	-	4	1	-	1	4	14
Iowa	-	1	-	-	-	-	-	-	14	23
Mo.	9	2	-	-	-	-	2	1	10	23
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	1	-	-	-	-	-	-	-	-	3
Nebr.	-	-	-	-	-	-	-	-	4	6
Kans.	5	-	-	-	-	-	-	-	12	39
S. ATLANTIC	98	120	-	-	9	22	-	-	390	765
Del.	-	-	-	-	-	-	-	-	3	6
Md.	19	31	-	-	1	-	-	-	45	87
D.C.	-	-	-	-	-	-	-	-	7	29
Va.	9	9	-	-	3	2	-	-	21	24
W. Va.	3	2	-	-	-	-	-	-	4	7
N.C.	9	11	-	-	-	1	-	-	24	91
S.C.	2	3	-	-	-	1	-	-	12	14
Ga.	22	40	-	-	2	12	-	-	148	177
Fla.	34	24	-	-	3	6	-	-	126	330
E.S. CENTRAL	35	23	-	1	5	5	-	-	41	96
Ky.	2	3	-	-	-	-	-	-	7	24
Tenn.	19	11	-	-	3	3	-	-	21	40
Ala.	12	5	-	1	1	2	-	-	9	10
Miss.	2	4	-	-	1	-	-	-	4	22
W.S. CENTRAL	20	23	-	1	3	4	-	-	72	198
Ark.	4	1	-	-	1	-	-	-	2	13
La.	4	2	-	-	-	-	-	-	11	13
Okla.	12	19	-	-	2	4	-	-	4	12
Tex.	-	1	-	1	-	-	-	-	55	160
MOUNTAIN	57	61	1	1	15	13	2	1	105	176
Mont.	-	-	-	-	-	-	-	-	1	5
Idaho	-	1	-	-	-	-	-	-	-	15
Wyo.	-	1	-	-	-	-	-	-	1	2
Colo.	13	14	-	-	4	2	-	-	10	24
N. Mex.	7	13	-	-	3	4	1	-	7	4
Ariz.	28	19	1	-	5	4	-	-	65	90
Utah	6	10	-	1	3	2	-	-	7	12
Nev.	3	3	-	-	-	1	1	1	14	24
PACIFIC	20	55	-	-	6	13	1	1	355	625
Wash.	3	-	-	-	2	-	1	-	13	38
Oreg.	12	27	-	-	3	4	-	-	22	34
Calif.	1	15	-	-	1	7	-	1	314	536
Alaska	-	1	-	-	-	1	-	-	3	6
Hawaii	4	12	-	-	-	1	-	-	3	11
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	4	-
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 5, 2003, and April 6, 2002 (14th Week)*

Reporting area	Hepatitis (viral, acute), by type				Legionellosis		Listeriosis		Lyme disease	
	B		C							
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	1,572	1,747	467	487	216	190	92	101	1,082	1,366
NEW ENGLAND	52	57	-	10	8	7	6	10	69	134
Maine	-	1	-	-	-	1	-	2	-	-
N.H.	3	5	-	-	-	1	1	2	3	14
Vt.	1	2	-	4	1	-	-	-	3	1
Mass.	45	37	-	6	2	3	3	4	3	112
R.I.	1	-	-	-	1	-	-	-	32	3
Conn.	2	12	-	-	4	2	2	2	28	4
MID. ATLANTIC	271	492	26	24	25	54	11	18	815	1,013
Upstate N.Y.	22	32	12	15	13	11	3	7	493	609
N.Y. City	98	325	-	-	6	12	5	4	-	55
N.J.	140	78	-	4	2	11	2	1	115	196
Pa.	11	57	14	5	4	20	1	6	207	153
E.N. CENTRAL	109	152	30	32	51	64	7	16	11	39
Ohio	38	24	4	-	27	30	2	8	8	5
Ind.	4	6	1	-	3	4	1	-	3	2
Ill.	-	21	2	8	2	6	-	1	-	-
Mich.	55	90	23	24	19	16	4	4	-	-
Wis.	12	11	-	-	-	8	-	3	U	32
W.N. CENTRAL	69	66	64	222	8	10	3	4	18	11
Minn.	5	1	1	-	2	1	1	-	13	5
Iowa	4	8	-	1	3	1	-	1	2	3
Mo.	42	38	62	218	1	4	-	1	1	3
N. Dak.	-	-	-	-	1	-	-	1	-	-
S. Dak.	1	-	-	-	-	1	-	-	-	-
Nebr.	11	10	1	3	-	3	2	-	-	-
Kans.	6	9	-	-	1	-	-	1	2	-
S. ATLANTIC	527	449	65	32	73	20	26	14	126	119
Del.	2	4	-	3	-	3	N	N	22	19
Md.	28	39	4	4	14	6	4	3	68	76
D.C.	1	4	-	-	1	-	-	-	2	5
Va.	28	56	-	-	4	2	2	1	9	1
W. Va.	2	7	-	-	N	N	1	-	-	-
N.C.	50	46	3	6	7	3	5	1	15	11
S.C.	32	17	20	3	1	2	1	2	-	1
Ga.	209	149	3	2	6	3	5	3	2	-
Fla.	175	127	35	14	40	1	8	4	8	6
E.S. CENTRAL	80	92	22	59	4	5	4	5	6	3
Ky.	13	12	3	1	-	3	-	1	1	1
Tenn.	29	37	1	11	2	-	-	2	2	-
Ala.	21	24	4	2	1	2	3	2	-	-
Miss.	17	19	14	45	1	-	1	-	3	2
W.S. CENTRAL	58	113	141	75	12	5	2	8	3	19
Ark.	2	37	-	5	-	-	-	-	-	-
La.	25	15	14	6	-	1	-	-	2	1
Okla.	8	1	-	-	2	1	1	3	-	-
Tex.	23	60	127	64	10	3	1	5	1	18
MOUNTAIN	158	107	17	8	13	6	11	8	5	3
Mont.	4	2	1	-	-	1	1	-	-	-
Idaho	-	1	-	-	1	-	-	-	1	1
Wyo.	2	6	-	2	1	-	-	-	-	-
Colo.	24	20	12	1	2	2	5	2	1	-
N. Mex.	5	19	-	-	1	1	1	-	-	1
Ariz.	93	39	3	-	4	-	4	4	-	1
Utah	11	9	-	-	2	2	-	2	2	-
Nev.	19	11	1	5	2	-	-	-	1	-
PACIFIC	248	219	102	25	22	19	22	18	29	25
Wash.	12	11	1	3	2	1	1	1	-	-
Oreg.	34	39	3	7	N	N	1	1	6	1
Calif.	192	164	11	15	20	18	20	16	22	24
Alaska	6	3	86	-	-	-	-	-	1	-
Hawaii	4	2	1	-	-	-	-	-	N	N
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	6	-	-	-	-	-	-	-	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 5, 2003, and April 6, 2002 (14th Week)*

Reporting area	Malaria		Meningococcal disease		Pertussis		Rabies, animal		Rocky Mountain spotted fever	
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	211	301	508	581	1,068	1,565	891	1,580	70	82
NEW ENGLAND	5	16	25	42	159	208	101	194	1	-
Maine	1	1	2	2	-	3	8	12	-	-
N.H.	1	4	1	4	10	2	3	5	-	-
Vt.	-	-	-	3	18	35	7	39	-	-
Mass.	3	7	18	24	130	163	40	64	1	-
R.I.	-	-	1	2	1	-	8	6	-	-
Conn.	-	4	3	7	-	5	35	68	-	-
MID. ATLANTIC	38	80	32	66	96	88	66	213	5	13
Upstate N.Y.	12	9	8	20	65	63	65	125	-	1
N.Y. City	19	51	8	15	-	5	1	8	2	3
N.J.	2	12	7	10	6	-	-	25	3	1
Pa.	5	8	9	21	25	20	-	55	-	8
E.N. CENTRAL	14	40	60	80	91	205	6	5	1	2
Ohio	5	7	26	29	65	116	-	1	1	2
Ind.	-	2	13	11	9	15	2	1	-	-
Ill.	2	12	-	13	-	31	1	1	-	-
Mich.	7	14	18	15	11	20	3	-	-	-
Wis.	-	5	3	12	6	23	-	2	-	-
W.N. CENTRAL	6	18	49	53	54	138	134	88	2	5
Minn.	4	7	10	10	27	46	6	7	-	-
Iowa	2	2	7	6	9	33	18	9	1	-
Mo.	-	4	25	24	10	36	4	4	1	5
N. Dak.	-	-	-	-	-	-	16	1	-	-
S. Dak.	-	-	-	2	1	5	6	22	-	-
Nebr.	-	2	3	7	1	2	28	-	-	-
Kans.	-	3	4	4	6	16	56	45	-	-
S. ATLANTIC	67	81	108	83	134	98	479	536	55	54
Del.	-	1	7	3	1	1	-	3	-	-
Md.	21	22	9	3	17	14	2	101	5	6
D.C.	2	2	-	-	-	-	-	-	-	-
Va.	6	5	6	13	30	31	140	144	1	1
W. Va.	2	-	1	-	1	1	17	39	-	-
N.C.	5	7	14	11	51	13	189	146	44	31
S.C.	2	2	4	11	4	21	36	20	3	6
Ga.	6	36	14	13	14	11	63	59	-	10
Fla.	23	6	53	29	16	6	32	24	2	-
E.S. CENTRAL	6	5	19	25	26	51	14	114	4	6
Ky.	1	1	-	4	4	12	9	6	-	-
Tenn.	3	1	3	6	12	28	-	108	3	4
Ala.	2	1	6	9	8	4	5	-	-	2
Miss.	-	2	10	6	2	7	-	-	1	-
W.S. CENTRAL	13	2	85	71	55	334	54	325	-	1
Ark.	1	-	7	9	-	189	17	-	-	-
La.	1	2	18	6	3	3	-	-	-	-
Okla.	-	-	5	6	2	12	37	26	-	-
Tex.	11	-	55	50	50	130	-	299	-	1
MOUNTAIN	9	9	16	39	222	179	18	41	1	1
Mont.	-	-	1	1	-	2	3	4	-	-
Idaho	1	-	1	1	8	22	-	-	-	-
Wyo.	-	-	-	-	37	5	-	1	-	-
Colo.	7	4	4	12	90	90	-	-	-	-
N. Mex.	-	-	2	1	15	24	-	-	-	-
Ariz.	1	2	6	12	47	20	15	36	1	-
Utah	-	2	-	1	19	10	-	-	-	-
Nev.	-	1	2	11	6	6	-	-	-	1
PACIFIC	53	50	114	122	231	264	19	64	1	-
Wash.	7	2	10	15	61	79	-	-	-	-
Oreg.	5	1	23	17	68	14	-	-	-	-
Calif.	41	44	75	86	102	165	17	42	1	-
Alaska	-	1	-	1	-	2	2	22	-	-
Hawaii	-	2	6	3	-	4	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	1	-	-	-	17	-	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.

* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 5, 2003, and April 6, 2002 (14th Week)*

Reporting area	Salmonellosis		Shigellosis		Streptococcal disease, invasive, group A		Streptococcus pneumoniae, invasive			
							Drug resistant, all ages		Age <5 years	
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	5,954	7,346	4,617	3,637	1,506	1,352	700	717	95	70
NEW ENGLAND	282	369	72	64	86	68	3	1	1	1
Maine	16	45	3	2	10	13	-	-	-	-
N.H.	18	16	-	3	11	16	-	-	N	N
Vt.	4	16	1	-	7	2	3	1	1	1
Mass.	162	208	44	47	57	37	N	N	N	N
R.I.	18	5	2	-	1	-	-	-	-	-
Conn.	64	79	22	12	-	-	-	-	-	-
MID. ATLANTIC	492	1,108	273	252	192	266	30	36	23	19
Upstate N.Y.	142	209	68	29	119	111	21	36	18	19
N.Y. City	189	390	93	116	28	72	U	U	U	U
N.J.	60	251	66	54	13	57	N	N	N	N
Pa.	101	258	46	53	32	26	9	-	5	-
E.N. CENTRAL	779	1,220	286	471	332	325	145	56	46	31
Ohio	281	294	71	236	106	62	104	-	36	-
Ind.	55	50	26	13	24	10	41	54	5	8
Ill.	232	503	108	143	55	111	-	2	-	-
Mich.	132	211	59	44	130	95	N	N	N	N
Wis.	79	162	22	35	17	47	N	N	5	23
W.N. CENTRAL	387	487	196	343	125	88	87	195	13	15
Minn.	106	100	22	37	55	42	-	125	13	14
Iowa	82	65	10	31	N	N	N	N	N	N
Mo.	104	198	64	39	25	22	4	4	-	1
N. Dak.	8	5	-	-	5	-	3	-	-	-
S. Dak.	17	20	8	114	12	3	-	1	-	-
Nebr.	26	30	68	83	15	7	4	20	N	N
Kans.	44	69	24	39	13	14	76	45	N	N
S. ATLANTIC	1,748	1,823	1,957	1,356	285	229	369	328	3	1
Del.	11	12	81	3	4	-	-	3	N	N
Md.	162	140	162	158	102	33	-	-	-	-
D.C.	8	19	14	17	5	3	-	26	-	1
Va.	141	144	69	263	22	27	N	N	N	N
W. Va.	15	12	-	2	11	2	17	15	3	-
N.C.	278	233	210	68	31	51	N	N	U	U
S.C.	69	77	49	13	7	18	27	65	N	N
Ga.	431	447	692	508	26	64	113	134	N	N
Fla.	633	739	680	324	77	31	212	85	N	N
E.S. CENTRAL	365	351	223	271	55	39	32	61	-	-
Ky.	72	49	34	45	10	5	1	8	N	N
Tenn.	121	107	67	16	45	34	31	53	N	N
Ala.	117	109	89	110	-	-	-	-	N	N
Miss.	55	86	33	100	-	-	-	-	-	-
W.S. CENTRAL	321	517	710	260	76	67	20	21	9	1
Ark.	67	65	14	36	1	-	5	2	-	-
La.	53	79	53	38	1	1	15	19	7	1
Okla.	43	61	163	57	26	11	N	N	2	-
Tex.	158	312	480	129	48	55	N	N	-	-
MOUNTAIN	445	404	251	116	194	129	13	19	-	2
Mont.	30	10	1	-	-	-	-	-	-	-
Idaho	57	23	6	2	10	3	N	N	N	N
Wyo.	5	15	1	1	-	3	4	8	-	-
Colo.	119	114	42	30	68	39	-	-	-	-
N. Mex.	31	62	36	20	47	35	9	11	-	-
Ariz.	136	100	143	46	62	41	-	-	N	N
Utah	41	29	10	9	7	8	-	-	-	2
Nev.	26	51	12	8	-	-	-	-	-	-
PACIFIC	1,135	1,067	649	504	161	141	1	-	-	-
Wash.	83	41	41	15	-	-	-	-	N	N
Oreg.	85	69	21	30	N	N	N	N	N	N
Calif.	903	890	572	442	131	125	N	N	N	N
Alaska	25	16	4	2	-	-	-	-	N	N
Hawaii	39	51	11	15	30	16	1	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	24	-	1	-	N	N	N	N	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 5, 2003, and April 6, 2002 (14th Week)*

Reporting area	Syphilis				Tuberculosis		Typhoid fever		Varicella (Chickenpox)
	Primary & secondary		Congenital		Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002					
UNITED STATES	1,657	1,625	81	107	1,448	2,702	60	80	3,325
NEW ENGLAND	46	21	-	-	56	93	5	6	629
Maine	2	-	-	-	-	5	-	-	325
N.H.	5	-	-	-	3	4	-	-	-
Vt.	-	-	-	-	-	1	-	-	228
Mass.	31	13	-	-	32	37	1	5	74
R.I.	5	2	-	-	3	16	2	-	2
Conn.	3	6	-	-	18	30	2	1	-
MID. ATLANTIC	180	174	15	15	301	449	7	28	2
Upstate N.Y.	4	7	8	1	44	61	3	3	N
N.Y. City	103	98	4	5	217	224	3	14	-
N.J.	46	40	3	8	-	105	1	8	-
Pa.	27	29	-	1	40	59	-	3	2
E.N. CENTRAL	221	326	21	13	217	239	4	10	1,833
Ohio	48	46	2	-	29	30	-	4	408
Ind.	7	16	3	-	32	29	1	1	-
Ill.	72	98	11	12	105	119	-	1	-
Mich.	90	159	5	1	48	44	3	3	1,221
Wis.	4	7	-	-	3	17	-	1	204
W.N. CENTRAL	45	19	1	-	87	111	-	3	9
Minn.	12	10	-	-	34	50	-	2	N
Iowa	3	-	-	-	6	-	-	-	N
Mo.	15	4	1	-	13	37	-	1	-
N. Dak.	-	-	-	-	-	-	-	-	9
S. Dak.	-	-	-	-	9	5	-	-	-
Nebr.	-	2	-	-	5	1	-	-	-
Kans.	15	3	-	-	20	18	-	-	-
S. ATLANTIC	454	396	11	26	239	533	15	11	689
Del.	2	5	-	-	-	-	-	-	3
Md.	80	42	-	3	41	55	2	2	-
D.C.	6	14	1	-	-	-	-	-	7
Va.	25	8	1	-	45	58	8	-	136
W. Va.	-	-	-	-	4	8	-	-	509
N.C.	48	91	5	7	37	68	2	-	N
S.C.	34	32	1	3	36	28	-	-	34
Ga.	87	63	2	6	62	94	1	5	-
Fla.	172	141	1	7	14	222	2	4	N
E. S. CENTRAL	105	170	10	11	152	184	2	2	-
Ky.	16	22	1	2	27	28	-	2	N
Tenn.	44	67	4	3	41	80	-	-	N
Ala.	39	60	4	4	69	53	2	-	-
Miss.	6	21	1	2	15	23	-	-	-
W.S. CENTRAL	222	204	12	26	37	482	-	4	83
Ark.	12	10	-	-	19	21	-	-	-
La.	24	35	-	-	-	-	-	-	3
Okla.	13	21	-	1	18	33	-	-	N
Tex.	173	138	12	25	-	428	-	4	80
MOUNTAIN	70	73	8	4	46	71	4	3	80
Mont.	-	-	-	-	-	-	-	-	N
Idaho	4	1	-	-	1	2	-	-	N
Wyo.	-	-	-	-	1	1	-	-	2
Colo.	3	8	2	1	13	17	3	1	-
N. Mex.	7	9	-	-	-	9	1	-	-
Ariz.	49	53	6	3	25	33	-	-	-
Utah	3	-	-	-	6	5	-	1	78
Nev.	4	2	-	-	-	4	-	1	-
PACIFIC	314	242	3	12	313	540	23	13	-
Wash.	16	16	-	-	55	58	-	-	-
Oreg.	12	4	-	-	23	23	2	2	-
Calif.	280	221	3	12	194	408	21	11	-
Alaska	-	-	-	-	13	18	-	-	-
Hawaii	6	1	-	-	28	33	-	-	-
Guam	-	-	-	-	-	-	-	-	-
P.R.	45	7	1	-	-	-	-	-	41
V.I.	-	1	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	U	U	-	U	-	U	-

N: Not notifiable. U: Unavailable. -: No reported cases.

* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE III. Deaths in 122 U.S. cities,* week ending April 5, 2003 (14th Week)

Reporting Area	All causes, by age (years)							Reporting Area	All causes, by age (years)							P&I [†] Total
	All Ages	≥65	45-64	25-44	1-24	<1	P&I [†] Total		All Ages	≥65	45-64	25-44	1-24	<1	P&I [†] Total	
NEW ENGLAND	522	368	95	37	9	13	59	S. ATLANTIC	1,338	805	336	124	52	21	83	
Boston, Mass.	147	91	35	12	2	7	21	Atlanta, Ga.	154	87	48	16	3	-	4	
Bridgeport, Conn.	31	26	5	-	-	-	3	Baltimore, Md.	214	113	52	33	13	3	16	
Cambridge, Mass.	16	13	3	-	-	-	1	Charlotte, N.C.	95	63	19	6	4	3	6	
Fall River, Mass.	38	32	3	3	-	-	4	Jacksonville, Fla.	152	88	44	9	5	6	9	
Hartford, Conn.	49	32	13	2	1	1	4	Miami, Fla.	99	61	28	6	4	-	7	
Lowell, Mass.	18	14	1	1	1	1	1	Norfolk, Va.	38	19	9	8	-	2	6	
Lynn, Mass.	8	6	2	-	-	-	1	Richmond, Va.	60	32	15	8	3	2	6	
New Bedford, Mass.	29	22	4	3	-	-	5	Savannah, Ga.	62	47	9	4	2	-	6	
New Haven, Conn.	43	31	7	1	1	3	9	St. Petersburg, Fla.	63	39	16	5	2	1	5	
Providence, R.I.	U	U	U	U	U	U	U	Tampa, Fla.	188	133	36	11	6	2	12	
Somerville, Mass.	4	3	-	1	-	-	-	Washington, D.C.	198	112	58	16	10	2	5	
Springfield, Mass.	48	31	10	5	1	1	4	Wilmington, Del.	15	11	2	2	-	-	1	
Waterbury, Conn.	22	18	2	1	1	-	3	E.S. CENTRAL	765	520	161	55	15	14	61	
Worcester, Mass.	69	49	10	8	2	-	3	Birmingham, Ala.	171	119	32	14	3	3	18	
MID. ATLANTIC	2,193	1,520	443	145	40	35	141	Chattanooga, Tenn.	40	29	8	1	-	2	2	
Albany, N.Y.	47	35	9	1	1	1	5	Knoxville, Tenn.	97	71	15	7	1	3	2	
Allentown, Pa.	13	9	3	1	-	-	1	Lexington, Ky.	59	35	14	8	2	-	5	
Buffalo, N.Y.	85	59	20	5	-	1	9	Memphis, Tenn.	170	121	31	10	5	3	17	
Camden, N.J.	24	15	7	1	1	-	2	Mobile, Ala.	50	29	18	2	-	1	1	
Elizabeth, N.J.	19	12	4	2	-	-	3	Montgomery, Ala.	36	25	7	3	1	-	6	
Erie, Pa.	44	33	10	1	-	-	1	Nashville, Tenn.	142	91	36	10	3	2	10	
Jersey City, N.J.	32	19	7	4	-	2	-	W.S. CENTRAL	1,459	922	339	99	62	37	111	
New York City, N.Y.	1,061	725	226	68	18	15	55	Austin, Tex.	67	50	11	6	-	-	8	
Newark, N.J.	40	19	11	6	2	2	2	Baton Rouge, La.	14	10	2	-	-	2	-	
Paterson, N.J.	36	19	9	3	3	2	1	Corpus Christi, Tex.	58	39	15	2	2	-	3	
Philadelphia, Pa.	403	274	77	35	11	6	22	Dallas, Tex.	205	121	50	18	7	9	18	
Pittsburgh, Pa. [‡]	38	23	9	3	2	1	2	El Paso, Tex.	94	61	20	8	5	-	5	
Reading, Pa.	19	13	4	2	-	-	1	Ft. Worth, Tex.	128	86	26	9	2	5	9	
Rochester, N.Y.	120	100	17	2	-	1	10	Houston, Tex.	362	200	90	28	34	10	21	
Schenectady, N.Y.	19	17	-	2	-	-	4	Little Rock, Ark.	62	38	16	4	2	2	1	
Scranton, Pa.	21	20	1	-	-	-	3	New Orleans, La.	U	U	U	U	U	U	U	
Syracuse, N.Y.	108	76	22	5	1	4	13	San Antonio, Tex.	254	168	65	12	3	6	20	
Trenton, N.J.	20	15	2	2	1	-	1	Shreveport, La.	75	55	12	4	2	2	5	
Utica, N.Y.	19	15	3	1	-	-	2	Tulsa, Okla.	140	94	32	8	5	1	21	
Yonkers, N.Y.	25	22	2	1	-	-	4	MOUNTAIN	995	692	199	61	21	22	78	
E.N. CENTRAL	1,920	1,293	431	117	33	43	144	Albuquerque, N.M.	146	96	32	13	4	1	11	
Akron, Ohio	48	32	11	1	2	2	3	Boise, Idaho	46	36	6	3	1	-	1	
Canton, Ohio	33	25	6	2	-	-	3	Colorado Springs, Colo.	66	45	16	2	1	2	1	
Chicago, Ill.	364	230	90	25	10	6	22	Denver, Colo.	112	69	25	10	1	7	6	
Cincinnati, Ohio	91	59	17	5	4	6	12	Las Vegas, Nev.	266	170	70	16	6	4	21	
Cleveland, Ohio	104	69	25	7	1	2	7	Ogden, Utah	23	14	7	2	-	-	3	
Columbus, Ohio	202	127	55	14	2	4	24	Phoenix, Ariz.	U	U	U	U	U	U	U	
Dayton, Ohio	122	96	20	4	1	1	9	Pueblo, Colo.	33	27	4	2	-	-	5	
Detroit, Mich.	173	89	60	15	1	8	11	Salt Lake City, Utah	135	98	22	6	3	6	14	
Evansville, Ind.	54	42	6	4	2	-	4	Tucson, Ariz.	168	137	17	7	5	2	16	
Fort Wayne, Ind.	65	50	13	2	-	-	-	PACIFIC	1,794	1,302	310	124	36	22	180	
Gary, Ind.	U	U	U	U	U	U	U	Berkeley, Calif.	20	12	6	2	-	-	1	
Grand Rapids, Mich.	65	46	12	3	-	4	8	Fresno, Calif.	150	109	24	17	-	-	7	
Indianapolis, Ind.	155	92	36	16	6	5	15	Glendale, Calif.	21	17	3	-	-	1	2	
Lansing, Mich.	32	24	6	1	-	1	3	Honolulu, Hawaii	86	65	13	5	1	2	8	
Milwaukee, Wis.	129	90	29	7	2	1	8	Long Beach, Calif.	65	47	10	5	2	1	10	
Peoria, Ill.	38	32	6	-	-	-	3	Los Angeles, Calif.	430	286	78	51	11	4	25	
Rockford, Ill.	47	31	13	2	1	-	4	Pasadena, Calif.	31	26	3	1	1	-	8	
South Bend, Ind.	53	41	9	3	-	-	4	Portland, Oreg.	128	100	20	5	1	2	11	
Toledo, Ohio	89	68	11	6	1	3	4	Sacramento, Calif.	167	116	35	11	4	1	29	
Youngstown, Ohio	56	50	6	-	-	-	-	San Diego, Calif.	162	120	27	9	3	3	15	
W.N. CENTRAL	565	386	118	34	11	16	51	San Francisco, Calif.	U	U	U	U	U	U	U	
Des Moines, Iowa	84	67	11	3	1	2	7	San Jose, Calif.	201	161	28	9	1	2	28	
Duluth, Minn.	35	24	7	1	1	2	3	Santa Cruz, Calif.	26	19	5	1	1	-	3	
Kansas City, Kans.	36	20	13	1	1	1	1	Seattle, Wash.	124	86	29	2	1	6	14	
Kansas City, Mo.	100	62	20	11	5	2	9	Spokane, Wash.	61	51	7	2	1	-	9	
Lincoln, Nebr.	21	17	2	2	-	-	2	Tacoma, Wash.	122	87	22	4	9	-	10	
Minneapolis, Minn.	74	50	15	5	2	2	7	TOTAL	11,551 [¶]	7,808	2,432	796	279	223	908	
Omaha, Nebr.	93	59	25	4	-	5	13									
St. Louis, Mo.	U	U	U	U	U	U	U									
St. Paul, Minn.	51	37	10	2	1	1	4									
Wichita, Kans.	71	50	15	5	-	1	5									

U: Unavailable. -:No reported cases.

* Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

† Pneumonia and influenza.

‡ Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶ Total includes unknown ages.

All *MMWR* references are available on the Internet at <http://www.cdc.gov/mmwr>. Use the search function to find specific articles.

Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

References to non-CDC sites on the Internet are provided as a service to *MMWR* readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of these sites. URL addresses listed in *MMWR* were current as of the date of publication.

The *Morbidity and Mortality Weekly Report (MMWR)* Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format and on a paid subscription basis for paper copy. To receive an electronic copy each week, send an e-mail message to listserv@listserv.cdc.gov. The body content should read *SUBscribe mmwr-toc*. Electronic copy also is available from CDC's World-Wide Web server at <http://www.cdc.gov/mmwr> or from CDC's file transfer protocol server at <ftp://ftp.cdc.gov/pub/publications/mmwr>. To subscribe for paper copy, contact Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone 202-512-1800.

Data in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the following Friday. Address inquiries about the *MMWR* Series, including material to be considered for publication, to Editor, *MMWR* Series, Mailstop C-08, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333; telephone 888-232-3228.

All material in the *MMWR* Series is in the public domain and may be used and reprinted without permission; citation as to source, however, is appreciated.

U.S. Government Printing Office: 2003-533-155/69106 Region IV